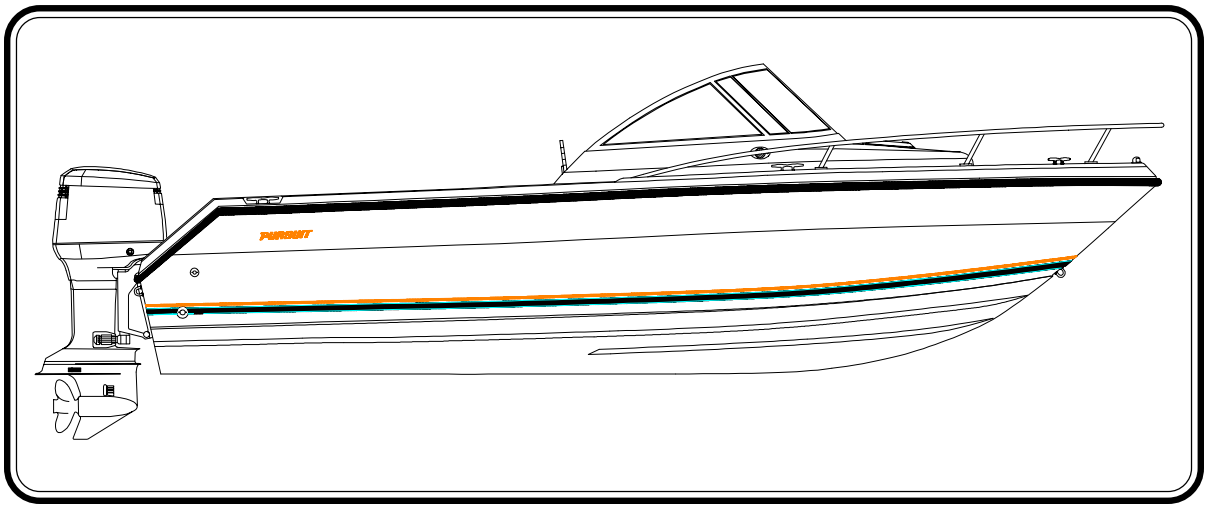
PURSUIT®

22 KODIAK

OWNER'S MANUAL



PURSUIT® FISHING BOATS
3901 St. Lucie Blvd.
Ft. Pierce, Florida 34946

Print Date 01/2000

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Dear Pursuit Kodiak Owner:

All of us at Pursuit are pleased that you have selected one of our products as your boat. As I'm sure you've discovered during the selection and decision process, your Pursuit has been designed, engineered and built with care and precision.

Please allow me to note my personal philosophy. When I started this company, my goal was to provide you, our customer, with the finest quality boat available. Everything we have achieved since that time has been with the same goal in mind.

The information in this owner's manual has been assembled to assist you with obtaining maximum enjoyment with your Pursuit. Please read this manual completely and always operate your boat safely and courteously.

Thank you for selecting a Pursuit Fishing Boat. We all wish you many years of boating fun and safety.

Sincerely,

Leon R. Slikkers
Chief Executive Officer

THIS PAGE WAS LEFT BLANK INTENTIONALLY

SAFETY INFORMATION

Your PURSUIT® 22 Kodiak Owner's Manual has been written to include a number of safety instructions to assure the safe operation and maintenance of your boat. These instructions are in the form of **WARNING, CAUTION** and **DANGER** statements. The following definitions apply:

IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.

HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN MINOR PERSONAL INJURY OR PRODUCT AND PROPERTY DAMAGE.

All instructions given in this book are as seen from the stern looking toward the bow, with starboard being to your right, and port to your left. A glossary of boating terms is included.

IMPORTANT NOTE: Your boat uses internal combustion engines and flammable fuel. Every precaution has been taken by Pursuit Fishing Boats to reduce the risks associated with possible injury and damage from fire or explosion, but your own precaution and good maintenance procedures are necessary in order to enjoy safe operation of your boat.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

BOAT INFORMATION

Please fill out the following information section and leave it in your Pursuit 2270 Kodiak Owner's Manual. This information will be important for you and Pursuit service personnel to know, if and when you may need to call Pursuit for technical assistance or service.

BOAT	
MODEL:	HULL SERIAL #:
PURCHASE DATE:	DELIVERY DATE:
IGNITION KEYS #:	REGISTRATION #:
DRAFT:	WEIGHT:
ENGINE(S)	
MAKE:	MODEL:
PORT SERIAL #:	STARBOARD SERIAL #:
TRANSMISSION(S) (Inboard)	
MAKE:	MODEL:
PORT SERIAL #:	STARBOARD SERIAL #:
RATIO:	
OUTDRIVE(S) (Inboard/Outboard)	
MAKE:	MODEL:
PORT SERIAL #:	STARBOARD SERIAL #:
PROPELLER(S)	
MAKE:	BLADES:
DIAMETER/PITCH:	OTHER:
TRAILER	
MAKE:	MODEL:
SERIAL #:	GVRW:
DEALER	**PURSUIT**
NAME:	PHONE:
DEALER/PHONE:	REPRESENTATIVE:
SALESMAN:	ADDRESS:
SERVICE MANAGER:	
ADDRESS:	

Pursuit Fishing Boats reserves the right to make changes and improvements in equipment, design and vendored equipment items, at any time without notification.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

IMPORTANT INFORMATION

Warranty and Warranty Registration Cards

The Kodiak Limited Warranty Statement is included with your boat. It has been written to be clearly stated and easily understood. If you have any questions after reading the warranty, please contact the Pursuit Customer Relations Department.

Pursuit, engine manufacturers, and the suppliers of major components maintain their own manufacturer's warranty and service facilities. It is important that you properly complete the warranty registration cards included with your boat and engine(s) and mail them back to the manufacturer to register your ownership. This should be done within 15 days of the date of purchase and before the boat is put into service. A form for recording this information is provided at the beginning of this manual. This information will be important for you and service personnel to know, if and when you may need service or technical information.

The boat warranty registration requires the **H**ull **I**dentification **N**umber **"HIN"** which is located on the starboard side of the transom, just below the rubrail. The engine warranty registration requires the engine serial number(s). Please refer to the engine owner's manual for the location of the serial number(s).

IMPORTANT:

All boat manufacturers are required by the Federal Boat Safety Act of 1971 to notify first time owners in the event any defect is discovered "which creates a substantial risk of personal injury to the public." **It is essential that we have your warranty registration card complete with your name and mailing address in our files so that we can comply with the law if it should become necessary.**

Product Changes

Pursuit is committed to the continuous improvement of our boats. As a result, some of the equipment described in this manual or pictured in the catalog may change or no longer be available. **Pursuit reserves the right to change standard equipment, optional equipment and specifications without notice or obligation.** If you have questions about the equipment on your Kodiak, please contact the Pursuit Customer Relations Department.

Transferring the Warranty

For a transfer fee, S2 Yachts will extend warranty coverage to subsequent owners of Pursuit models for the duration of the original warranty period. Please refer to the Kodiak Limited Warranty Statement for the procedure to transfer the warranty.

To take advantage of this program, notification of the change of ownership, including the new owner's name, address and telephone number together with the appropriate fee, must be sent to Pursuit Fishing Boats, Customer Relations Department, 3901 St. Lucie Boulevard, Ft. Pierce, Florida 34946, within 30 days of the date of resale.

IMPORTANT INFORMATION

S2 Yachts will confirm, in writing, that the transfer of the warranty has taken place. After which, the transferee will be treated as the original purchaser as outlined in the Kodiak Limited Warranty Statement.

Service

All warranty repairs must be performed by an authorized Pursuit dealer. Should a problem develop that is related to faulty workmanship or materials, as stated in the Limited Warranty, you should contact your Pursuit dealer to arrange for the necessary repair. If you are not near your dealer or another authorized Pursuit dealer or the dealer fails to remedy the cause of the problem, then contact the Pursuit Customer Relations Department within 15 days. **It is the boat owner's responsibility to deliver the boat to the dealer for warranty service.**

OWNER'S/OPERATOR'S RESPONSIBILITIES

Registration and Numbering

Federal law requires that all undocumented vessels equipped with propulsion machinery be registered in the state of principal use. A certificate of number will be issued upon registering the boat. These numbers must be displayed on your boat. The owner/operator of a boat must carry a valid certificate of number whenever the boat is in use. When moved to a new state of principal use, the certificate is valid for 60 days.

In order to be valid, the numbers must be installed to the proper specifications. Check with your dealer or State Boating Authority for numbering requirements. The Coast Guard issues the certificate of number in Alaska; all others are issued by the state.

Insurance

In most states the boat owner is legally responsible for damages or injuries he or someone else operating the boat causes. Responsible boaters carry adequate liability and property damage insurance for their boat. You should also protect the boat against physical damage and theft. Some states have laws requiring minimum insurance coverage. Contact your dealer or State Boating Authority for information on the insurance requirements in your boating area.

Reporting Boating Accidents

All boating accidents must be reported by the operator or owner of the boat to the proper marine law enforcement authority for the state in which the accident occurred. Immediate notification is required if a person dies or disappears as a result of a recreational boating accident.

If a person dies or there are injuries requiring more than first aid, a formal report must be filed within 48 hours.

A formal report must be made within 10 days for accidents involving more than $500.00 damage or the complete loss of a boat.

A Boating Accident Report form is located near the back of this manual to assist you in reporting an accident. If you need additional information regarding accident reporting, please call the Boating Safety Hotline, 800-368-5647.

Education

If you are not an experienced boater, we recommend that the boat operator and other people that normally accompany the operator enroll in a boating safety course. Organizations such as the U.S. Power Squadrons, United States Coast Guard Auxiliary, State Boating Authorities and the American Red Cross offer excellent boating educational programs. These courses are worthwhile even for experienced boaters to sharpen your skills or bring you up to date on current rules and

OWNER'S/OPERATOR'S RESPONSIBILITIES

regulations. They can also help in providing local navigational information when moving to a new boating area. Contact your dealer, State Boating Authority or the Boating Safety Hotline, 800-368-5647 for further information on boating safety courses.

Required Equipment

U.S. Coast Guard regulations require certain equipment on each boat. The Coast Guard also sets minimum safety standards for vessels and associated equipment. To meet these standards some of the equipment must be Coast Guard approved. "Coast Guard Approved Equipment" has been determined to be in compliance with USCG specifications and regulations relating to performance, construction, or materials. The equipment requirements vary according to the length, type of boat, and the propulsion system. Some of the Coast Guard equipment is described in the Safety Equipment chapter of this manual. For a more detailed description, obtain "Federal Requirements And Safety Tips For Recreational Boats" by contacting the Boating Safety Hotline 800-368-5647 or your local marine dealer or retailer and read the book "Sportfish, Cruisers and Yachts" included with your boat.

Some state and local agencies impose similar equipment requirements on waters that do not fall under Coast Guard jurisdiction. These agencies may also require additional equipment that is not required by the Coast Guard. Your dealer or local boating authority can provide you with additional information for the equipment requirements for your boating area.

TABLE OF CONTENTS

Chapter 1: **Propulsion System**

Page No.

1.1 General 1-1
1.2 Drive Systems 1-2
1.3 Engine Lubrication 1-2
1.4 Engine Cooling System 1-3
1.5 Propellers 1-3
1.6 Engine Instrumentation 1-4

Chapter 2: **Helm Control Systems**

2.1 General 2-1
2.2 Engine Throttle and Shift Controls 2-1
2.3 Neutral Safety Switch 2-2
2.4 Engine Stop Switch 2-2
2.5 Engine Power Tilt and Trim 2-3
2.6 Steering System 2-4
2.7 Trim Tabs 2-4
2.8 Control Systems Maintenance 2-5

Chapter 3: **Fuel System**

3.1 General 3-1
3.2 Outboard Fuel System 3-3
3.3 Fueling Instructions 3-4
3.4 Fuel System Maintenance 3-5

TABLE OF CONTENTS

Chapter 4: **Electrical System**

Page No.

4.1 General 4-1
4.2 12-Volt System 4-1
4.3 Electrical System Maintenance 4-4

Chapter 5: **Freshwater System**

5.1 General 5-1
5.2 Freshwater Washdown Operation 5-2
5.3 Freshwater System Maintenance 5-2

Chapter 6: **Raw Water System**

6.1 General 6-1
6.2 High Pressure Washdown 6-2
6.3 Livewell 6-3
6.4 Raw Water System Maintenance 6-4

Chapter 7: **Drainage Systems**

7.1 Cabin Sole and Cockpit Drainage 7-1
7.2 Bilge Drainage 7-2
7.3 Fishboxes/Coolers and Livewell Drains 7-3
7.4 Rope Locker Drain 7-3
7.5 Maintenance 7-3

TABLE OF CONTENTS

Chapter 8: **Ventilation**

Page No.

8.1 Cabin Ventilation 8-1
8.2 Windshield Ventilation 8-1
8.3 Carbon Monoxide and Ventilation 8-2
8.4 Maintenance 8-3

Chapter 9: **Safety Equipment**

9.1 General 9-1
9.2 Engine Alarms 9-1
9.3 Neutral Safety Switch 9-2
9.4 Engine Stop Switch 9-2
9.5 Required Safety Equipment 9-2
9.6 Carbon Monoxide Monitoring System 9-5
9.7 First Aid 9-7
9.8 Additional Safety Equipment 9-7
9.9 Maximum Capacity Rating 9-8

Chapter 10: **Operation**

10.1 General 10-1
10.2 Rules of the Road 10-1
10.3 Pre-Cruise System Check 10-3
10.4 Operating Your Boat 10-4
10.5 Grounding and Towing 10-7
10.6 Water Skiing 10-8
10.7 Fishing 10-9
10.8 Trailering Your Boat 10-9

TABLE OF CONTENTS

Chapter 11: **Exterior Equipment**

Page No.

11.1 Deck 11-1
11.2 Hull 11-3
11.3 Cockpit 11-4

Chapter 12: **Interior Equipment**

12.1 Portable Head 12-1
12.2 Cabin and V-Berth 12-2
12.3 Carbin Monoxide Detector 12-2

Chapter 13: **Routine Maintenance**

13.1 Exterior Hull and Deck 13-1
13.2 Upholstery, Canvas and Enclosures 13-5
13.3 Bilge 13-7
13.4 Drainage System 13-8

Chapter 14: **Seasonal Maintenance**

14.1 Lay-up and Storage 14-1
14.2 Winterizing 14-4
14.3 Recommissioning 14-5

TABLE OF CONTENTS

Chapter 15: **Schematics**

12-Volt Wiring Schematic 15-1
Battery Wiring 15-2
Hydraulic Steering System 15-3
Fuel System 15-4
Raw Water System 15-5
Freshwater System 15-6
Drainage System 15-7

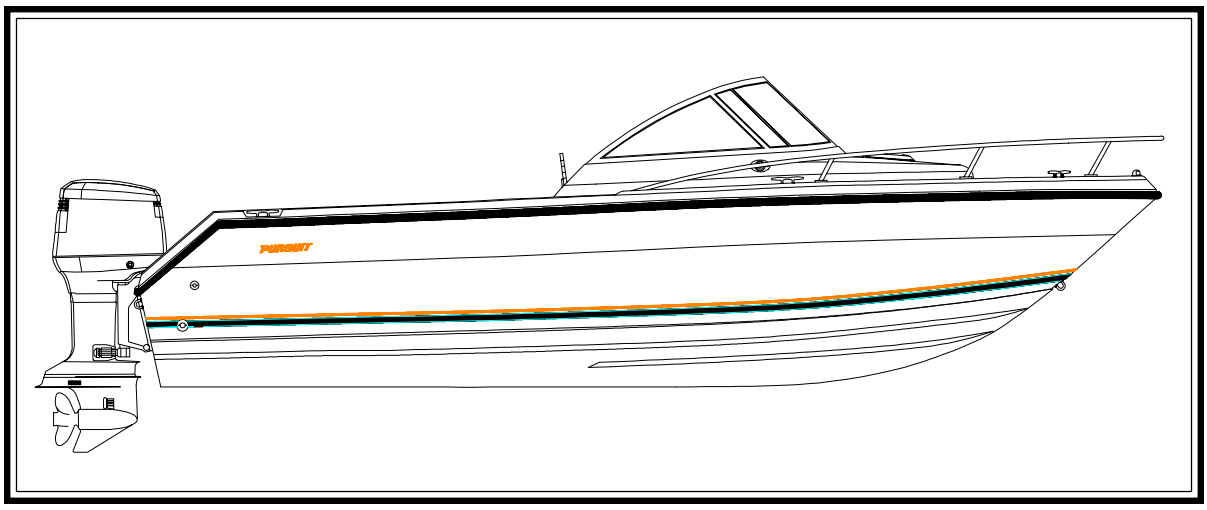
Appendix A: Glossary of Terms A-1

Appendix B: Maintenance Log B-1

Appendix C: Boating Accident Report C-1

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Chapter 1:
PROPULSION SYSTEM



1.1 General

The Pursuit 22 Kodiak is designed to be powered with a 2-cycle outboard motor. All outboard motors used on your Pursuit use an oil injection system. Oil is automatically injected in the engine and mixed at the proper ratio from an oil tank located in the stern of the boat.

Note: Always monitor the oil level in the tank and only use the type of oil specified by the engine manufacturer.

Each manufacturer of the various outboard motors provides an owner's information manual with its product. It is important that you read the manual very carefully and become familiar with the proper care and operation of the engine and drive system. A warranty registration card has been furnished with each new engine and can be located in the engine owner's manual. All information requested on this card should be filled out completely by the dealer and purchaser and then returned to the respective engine manufacturer as soon as possible.

DO NOT ATTEMPT TO SERVICE ANY ENGINE OR DRIVE COMPONENT WITHOUT BEING TOTALLY FAMILIAR WITH THE SAFE AND PROPER SERVICE PROCEDURES. CERTAIN MOVING PARTS ARE EXPOSED AND CAN BE DANGEROUS TO SOMEONE UNFAMILIAR WITH THE OPERATION AND FUNCTION OF THE EQUIPMENT.

DO NOT INHALE EXHAUST FUMES! EXHAUST CONTAINS CARBON MONOXIDE THAT IS COLORLESS AND ODORLESS. CARBON MONOXIDE IS A DANGEROUS GAS THAT IS POTENTIALLY LETHAL.

1.2 Drive Systems

Each outboard motor is a complete drive system with the gear case being just forward of the propeller and connected to the power head with a vertical drive shaft. Other than the routine maintenance outlined in the engine owner's manual, there is little to be concerned with unless the boat is to be kept in saltwater for extended periods of time. Then, the main concerns are marine growth and galvanic corrosion.

Marine growth occurs when components are left in the water for extended periods and can cause poor performance or permanent damage to the exposed components. The type of growth and how quickly it occurs is relative to the water conditions in your boating area. Water temperature, pollution, current, etc. can have an effect on marine growth.

Galvanic corrosion is the corrosion process occurring when different metals are submerged in an electrolyte. Seawater is an electrolyte and submerged engine components must be properly protected. Outboard motors are equipped with sacrificial zinc anodes to prevent galvanic corrosion problems. The zinc anodes must be monitored and replaced as necessary. For locations and maintenance, please refer to the engine owner's manual.

When leaving the boat in the water, turn the steering wheel full starboard and tilt the motor as high as possible. This will decrease the risk of marine growth around the cooling inlets, propeller and exhaust ports and damage from galvanic corrosion.

DO NOT PAINT THE OUTBOARD MOTOR WITH ANTIFOULING PAINTS DESIGNED FOR BOAT HULLS. MANY OF THESE PAINTS CAN CAUSE SEVERE DAMAGE TO THE ENGINE. CONTACT YOUR PURSUIT DEALER OR ENGINE MANUFACTURER FOR INFORMATION ON THE PROPER PAINTING PROCEDURES.

1.3 Engine Lubrication

Your outboard motor is lubricated by a variable ratio oil injection system. The oil tank is mounted in the stern of the boat. Always monitor the oil level before each cruise by checking the gauge in the helm or visually checking the oil level using the reference marks on the tank. When additional oil is needed, use only the type of oil specified by the engine manufacturer. Refer to the engine owner's manual for oil specifications and additional information on the oil injection system.

Oil Tank

1.4 Engine Cooling System

Outboard engines are raw water (seawater) cooled. Water is pumped through the water inlets, circulated through the engine block, and relinquished with the exhaust gases through the propeller hub. The water pump uses a small impeller made of synthetic rubber. The impeller and water pump cannot run dry for more than a few seconds. In most outboard motors, some cooling water is diverted through small ports below the engine cowling. This allows the operator to visually check the operation of the cooling system. When the engine is started, always check for a steady stream of water coming out of those ports.

NEVER RUN AN OUTBOARD MOTOR WITHOUT WATER FLOWING TO THE WATER PUMP. SERIOUS DAMAGE TO THE WATER IMPELLER OR ENGINE COULD RESULT.

Note: If the boat is used in salt or badly polluted water, the engine should be flushed after each use. Refer to the engine owner's manual for the proper engine flushing procedure.

1.5 Propellers

The propeller converts the engine's power into thrust. Propellers come in a variety of styles, diameters and pitches. The one that will best suit the needs of your Kodiak will depend somewhat on your application and expected average load. Propeller sizes are identified by two numbers stamped on the prop in sequence. The 1st number in the sequence (example 14 x 21) is the diameter of the propeller and the 2nd number is the pitch. Pitch is the theoretical distance traveled by the propeller in each revolution. Always repair or replace a propeller immediately if it has been damaged. A damaged and therefore out of balance propeller can cause vibration that can be felt in the boat and could damage the engine gear assembly. Refer to the engine owner's manual for information on propeller removal and installation.

RUNNING AGROUND OR STRIKING AN UNDERWATER OBSTRUCTION CAN RESULT IN SERIOUS INJURY AND DAMAGE TO THE MOTOR OR BOAT. IF YOUR BOAT RUNS AGROUND, EVALUATE THE DAMAGE, THEN PROCEED AT LOW SPEED TO THE NEAREST SERVICE FACILITY AND HAVE AN IMMEDIATE INSPECTION MADE BEFORE FURTHER USE OF THE CRAFT. A DAMAGED BOAT CAN TAKE ON WATER. KEEP ALL LIFE SAVING DEVICES CLOSE AT HAND WHILE DRIVING TO A DOCK AREA. IF THE BOAT CANNOT IMMEDIATELY BE REMOVED FROM THE WATER, THOROUGHLY INSPECT THE BILGE AREA FOR LEAKS SO THAT THE BOAT DOES NOT SINK WHILE MOORED.

1.6 Engine Instrumentation

Instrument Panel

The helm station is equipped with a set of engine instruments and/or alarms. These instruments allow the pilot to monitor the engine's operational conditions. Close observation of these instruments allows the pilot to operate the engine at the most efficient level and could save the engine from serious costly damage. The instrumentation is unique to the type of outboard motor installed on your Kodiak. Some or all of the following gauges may be present.

Tachometer

The tachometer displays the speed of the engine in revolutions per minute (RPM). This speed is not the boat speed nor necessarily the speed of the propeller. The tachometer may not register zero with the key in the "OFF" position.

NEVER EXCEED THE MAXIMUM RECOMMENDED OPERATION RPM OF THE ENGINE. MAINTAINING MAXIMUM, OR CLOSE TO MAXIMUM RPM FOR EXTENDED PERIODS CAN REDUCE THE LIFE OF THE ENGINE.

Speedometer

The speedometer indicates the speed of the boat in miles per hour.

Temperature Gauge

The temperature gauge shows the temperature of the engine cooling system. A sudden increase in the temperature could indicate an obstructed water inlet or an impeller failure.

CONTINUED OPERATION OF AN OVERHEATED ENGINE CAN RESULT IN ENGINE SEIZURE. IF AN UNUSUALLY HIGH TEMPERATURE READING OCCURS, SHUT THE ENGINE OFF IMMEDIATELY, THEN INVESTIGATE AND CORRECT THE PROBLEM.

Water Pressure Gauge

The water pressure gauge monitors the water pressure in the engine cooling system. Refer to the engine manufacturer owner's manual for more information on the cooling system water pressure requirements for your engine.

DO NOT OPERATE THE ENGINE IF LOW WATER PRESSURE IS INDICATED. THIS COULD BE AN INDICATION OF A COOLING SYSTEM BLOCKAGE OR AN IMPELLER FAILURE. IF LOW WATER PRESSURE IS INDICATED, SHUT THE ENGINE OFF TO INVESTIGATE AND CORRECT THE PROBLEM.

Oil Level Gauge
The oil level gauge indicates the amount of oil in the engine oil tank.

Fuel Gauge
The fuel gauge indicates the amount of fuel in the fuel tank.

Voltmeter
The voltmeter displays the voltage for the batteries and the charging system. The normal voltage is 11 to 12 volts with the engine off, and 13 to 14.5 volts with the engine running.

Hour Meter
The hour meter keeps a record of the operating time for the engine.

Engine Alarms
Most outboards are equipped with an audible alarm system mounted in the helm area that monitors selected critical engine systems. The alarm will sound if one of these systems begins to fail. Refer to the engine owner's manual for information on the alarms installed with your engines.

IF THE ENGINE ALARM SOUNDS, IMMEDIATELY SHUT OFF THE ENGINE UNTIL THE PROBLEM IS FOUND AND CORRECTED.

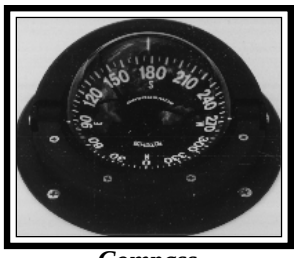
Tilt/Trim Gauge
The tilt/trim gauge monitors the position of the outboard engine. The upper range of the gauge indicates the tilt, which is used for trailering and shallow water operation. The lower range indicates the trim position. This is the range used to adjust the hull angle while operating your boat on plane. Please refer the engine owner's manual for more information on the operation of the outboard power tilt and trim.

Fuel Management Gauge
Fuel management systems are optional equipment with some outboard engines. On Yamaha® engines, the fuel management gauge is a multifunction gauge used to monitor the gallons per hour, miles per gallon, and total gallons used. If you have a fuel management system installed on your boat, please refer to the engine or fuel management manual for information on that system.

Depth Gauge
The depth gauge indicates the depth of the water below the bottom of the boat.

Compass

The compass is on top of the helm. To adjust the compass for your area, read the instructions on "Compass Compensation" given to you in the literature packet. The compass cannot be adjusted accurately at the factory as it must be compensated for the influence of the electrical equipment and electronics unique to your boat. Therefore, a professional should adjust the compass after the electronics and additional electrical accessories are installed and before operating the boat.



Compass

Instrument Maintenance

Electrical protection for instruments and ignition circuitry is provided by a set of circuit breakers located near the main battery switch. The ignition switches should be sprayed periodically with a contact cleaner/lubricant. The ignition switches and all instruments, controls, etc. should be protected from the weather when not in use. Excessive exposure can lead to gauge and ignition switch difficulties.

Chapter 2:
HELM CONTROL SYSTEMS

2.1 General

The helm controls consist of three systems: the engine throttle and shift controls, the steering system, and the trim tab control switches (optional). These systems provide the operator with the ability to control the direction and attitude of the boat from the helm station.

Each manufacturer of the control components provides an owner's manual with its product. It is important that you read the manuals and become familiar with the proper care and operation of the control systems.

2.2 Engine Throttle and Shift Controls

The shift and throttle controls on your boat may vary depending on the engine used. The following control description is typical of most outboard remote controls. Refer to the engine or control manual for specific information on the controls installed on your Kodiak.

Controls

The engine throttle and shift control system consists of three major components: the control handle, the throttle cable, and the shift cable. The cables are the push-pull type. Two cables are required. One connects the remote throttle control to the carburetor or fuel injection system and the other connects the remote shift control to the engine shift rod linkage.

The helm on your Kodiak is designed for a binnacle style control with a single lever that operates as a gear shift and a throttle. General operation will include a position for neutral (straight up and down), a forward position (the 1st detente forward of neutral), and a reverse position (the 1st detente aft of neutral). Advancing the control lever beyond the shift range advances the throttle in forward or reverse. Each control is equipped with a means of permitting the engine to be operated at a higher than idle RPM while in neutral for cold starting and warm-up purposes. See your engine owner's manual for details of this operation.

2.3 Neutral Safety Switch

Every control system has a neutral safety switch. This device prohibits the engine from being started while the shift lever is in any position other than the neutral position. If the engine will not start, slight movement of the shift lever may be necessary to locate the neutral position and disengage the safety cutout switch. Control or cable adjustments may be required to correct this condition, should it persist. See your Pursuit dealer for necessary control and cable adjustments.

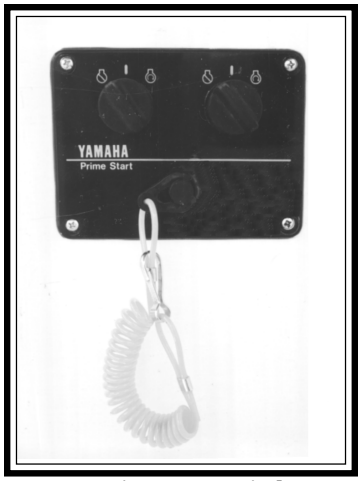
The neutral safety switch should be tested periodically to insure that it is operating properly. To test the neutral safety switch, make sure the outdrive is tilted down and move the shift lever to the forward position. ***Make sure the control lever is not advanced past the idle position.*** Turn the ignition key to the start position just long enough to briefly engage the starter for the engine. ***Do not hold the key in the start position long enough to start the engine.*** The starter should not engage. Repeat this test with the shift lever in reverse and the engine throttle at idle. Again, the starter should not engage. If the starter engages with the shift control in any position other than the neutral position, then the neutral safety switch is not functioning properly and you should contact your dealer and have the neutral safety switch repaired before using your boat. If the engine starts in gear during this test, immediately move the control lever to the neutral position. Turn the engine off and have the problem corrected by a qualified marine mechanic before using the boat.

IN SOME SITUATIONS, IT MAY BE POSSIBLE TO ACCIDENTALLY START THE ENGINE IN GEAR WITH THE THROTTLE ABOVE IDLE IF THE NEUTRAL SAFETY SWITCH IS NOT OPERATING PROPERLY. THIS WOULD CAUSE THE BOAT TO ACCELERATE UNEXPECTEDLY IN FORWARD OR REVERSE AND COULD RESULT IN LOSS OF CONTROL, DAMAGE TO THE BOAT, OR INJURY TO PASSENGERS. ALWAYS TEST THE NEUTRAL SAFETY SWITCH PERIODICALLY AND CORRECT ANY PROBLEMS BEFORE USING THE BOAT.

2.4 Engine Stop Switch

All Pursuit boats rigged with outboard motors are equipped with an engine stop switch and lanyard. When the lanyard is pulled it will engage the switch and shut off the engine. We strongly recommend that the lanyard be attached to the driver whenever the engine is running. If the engine will not start, it could be because the lanyard is not properly inserted into the switch. Always make sure the lanyard is properly attached to the engine stop switch before attempting to start the engine.

Please refer to the engine owner's manual for additional information on the engine stop switch.



Engine Stop Switch

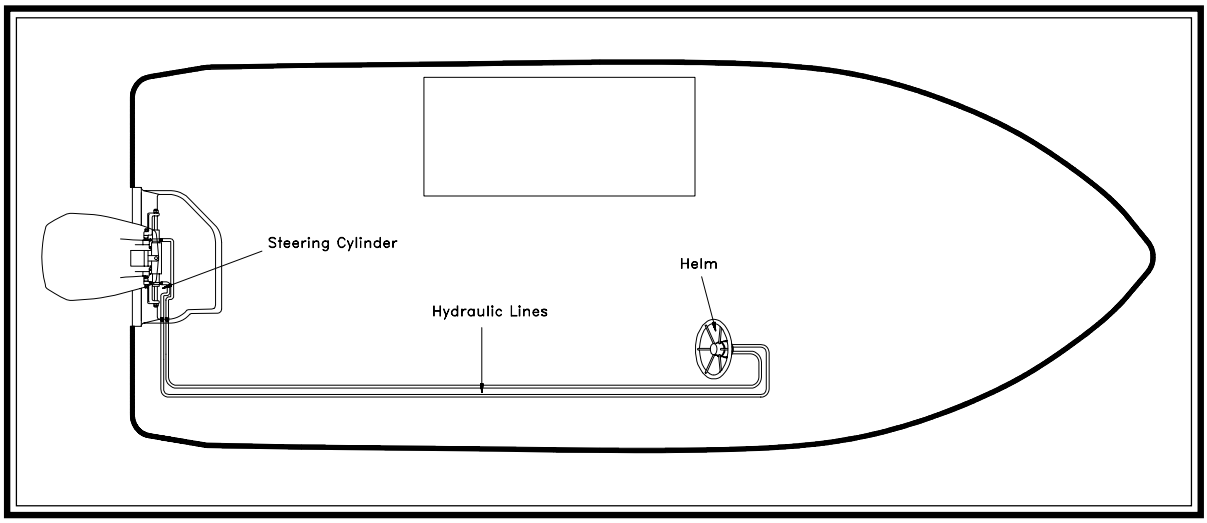
2.5 Engine Power Tilt and Trim

All outboard engines have a tilt and trim feature. The tilt and trim switches are usually built into the engine shift and throttle controls and allow the operator to control the position of the outboard from the helm. Moving the outboard closer to the boat transom is called trimming "in" or "down." Moving the outboard further away from the boat transom is called trimming "out" or "up." In most cases, the boat will run best with the outboards adjusted so the hull will run at a 3 to 5 degree angle to the water.

The term "trim" generally refers to the adjustment of the outboard within the first 20° range of travel. This is the range used while operating your boat on plane. The term "tilt" is generally used when referring to adjusting the outboard further up for shallow water operation or trailering. For information on the proper use and maintenance of the power tilt and trim, please refer to the engine owner's manual.

THE ENGINE HOSES AND CABLES OR THE TRANSOM GEL COAT CAN BE DAMAGED BY TILTING THE ENGINE TO THE FULL UP POSITION WITH THE ENGINE TURNED TO THE WRONG POSITION. MOST TWIN ENGINE AND SINGLE ENGINE BOATS REQUIRE THE STEERING WHEEL TO BE TURNED COMPLETELY TO STARBOARD BEFORE TILTING THE ENGINES TO THE FULL UP POSITION. YOU SHOULD MONITOR THE ENGINE AS IT TILTS TO DETERMINE BEST FULL TILT ENGINE POSITION FOR YOUR BOAT.

SOME AUTOPILOTS HAVE ENGINE POSITION SENSORS THAT ARE MOUNTED TO THE HYDRAULIC STEERING CYLINDER. WITH THESE AUTOPILOTS, THE ENGINE POSITION SENSOR BRACKET COULD HIT THE TRANSOM WHEN THE ENGINES ARE TILTED TO THE FULL UP POSITION AND CAUSE DAMAGE TO THE ENGINE RIGGING, THE AUTOPILOT OR THE TRANSOM. IF YOU HAVE AN AUTOPILOT INSTALLED ON YOUR BOAT, YOU SHOULD MONITOR THE LOCATION OF THE ENGINE CABLES AND AUTOPILOT BRACKETS AS THE ENGINE IS TILTED TO DETERMINE THE BEST ENGINE POSITION AND MAXIMUM ENGINE TILT FOR YOUR APPLICATION.



Hydraulic Steering System

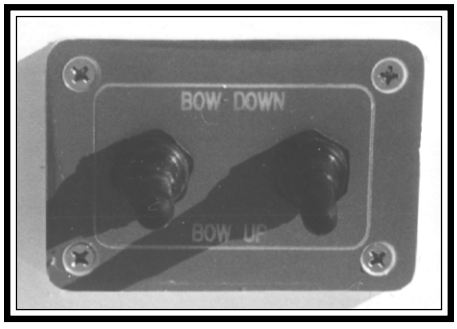
2.6 Steering System

Hydraulic Steering System

The hydraulic steering system is made of two main components: the helm assembly and the hydraulic cylinder. The helm unit acts as both a fluid reservoir and pump. Turning of the helm, or steering wheel, pumps the fluid in the hydraulic hoses and activates the hydraulic cylinder causing the motor to turn. A slight clicking sound may be heard as the wheel is turned. This sound is the opening and closing of valves in the helm unit and is normal.

2.7 Trim Tabs (Optional)

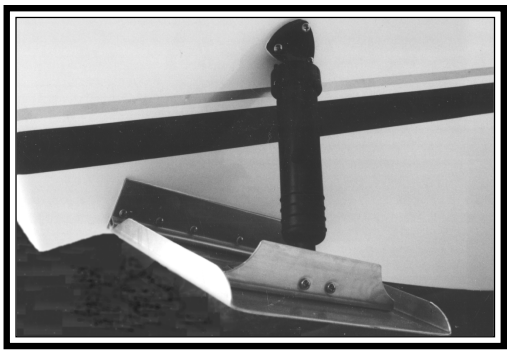
Pursuit uses a dual toggle switch to control the trim tabs. The switch is labeled and controls bow up and down movements. It also controls starboard and port up and down movements. Bow up and bow down will control the hull planing attitude while port and starboard up and down provides control for the hull listing.



Trim Tab Switch

Before leaving the dock, make sure that the tabs are in the full "UP" position by holding the control in the bow up position for ten (10) seconds.

Always establish the intended heading and cruise speed before attempting to adjust the hull attitude with the trim tabs. After stabilizing speed and direction, move the trim tabs to achieve a level side to side running attitude, being careful not to over trim. After depressing a trim tab switch, always wait a few seconds for the change in trim plane to take effect. **Avoid depressing the switch while awaiting the trim plane reaction.** By the time the effect is noticeable, the trim plane will have moved too far and thus the boat will be in an overcompensated position.



Trim Tab

When running at a speed that will result in the boat falling off plane, lowering the tabs slightly, bow down, will improve the running angle and operating efficiency. Too much bow down can reduce operating efficiency and cause substantial steering and handling difficulties.

Be extremely careful when operating in a following sea. The effect of trim tabs is amplified under such conditions. Steering and handling difficulties can result from improper trim tab usage, particularly in a following sea. Always raise the tabs to the full bow up position in these conditions. **When running at high speeds be sure that the tabs are in the full "UP" position.** Only enough trim plane action should be used to compensate for any listing. Trim tabs are extremely sensitive at high speeds. Adjust for this and be prepared to slow down if difficulties arise.

When running into a chop, a slight bow down attitude will improve the ride. Be careful not to over trim. Handling difficulties may result.

2.8 Control Systems Maintenance

Control Maintenance

Periodic inspection of the control systems and all connections should be made. Signs of rust, corrosion, wear, or other deterioration should be serviced immediately. Generally, periodic lubrication of all moving parts and connections with a light waterproof grease is in order.

Lubrication should be performed as often as necessary to keep the system operating smoothly.

Control system adjustments may become necessary. If adjustment becomes necessary, see your Pursuit dealer.

DO NOT ATTEMPT CONTROL SYSTEM ADJUSTMENTS UNLESS YOU ARE FAMILIAR WITH CONTROL SYSTEM SERVICING PROCEDURES. MISADJUSTMENT CAN CAUSE LOSS OF CONTROL AND SEVERE ENGINE OR LOWER UNIT DAMAGE.

Steering System Maintenance

A periodic inspection of all steering cables, hoses, linkage and helm assemblies should be made. Signs of corrosion, cracking, loosening of fastenings, excessive wear, or deterioration should be corrected immediately. Generally, periodic lubrication of all moving parts and connections with a light waterproof grease is in order. Failure to do so could lead to steering system failure that would result in loss of control.

When new, or after repairs, hydraulic steering systems may need to have all air purged from the system. Review the information provided by the steering manufacturer for proper specifications and details on system service and maintenance.

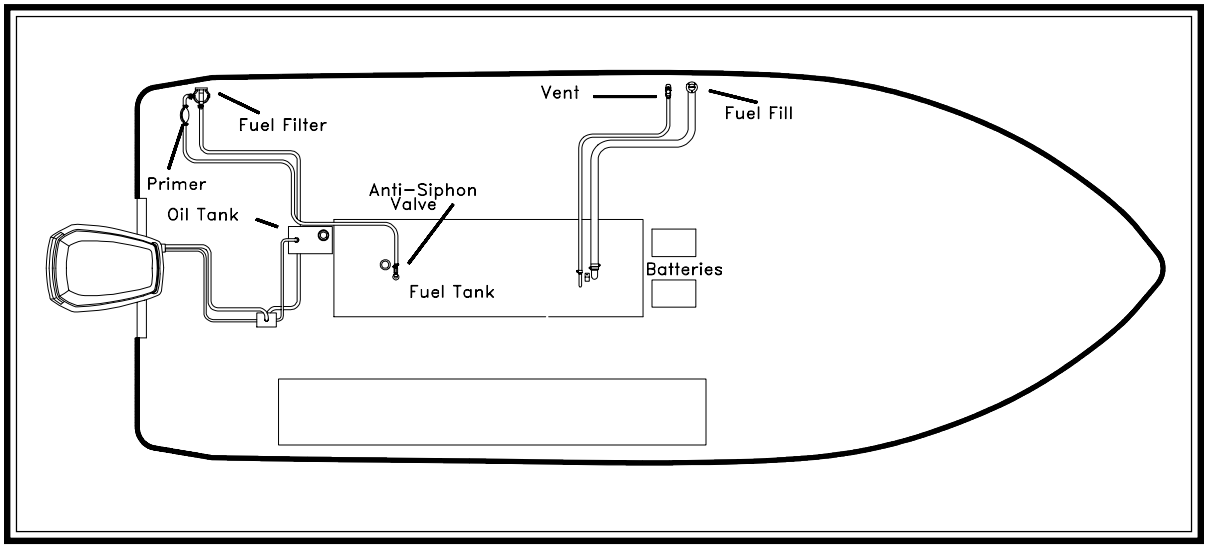
Trim Tab Maintenance

Marine growth can interfere with the proper operation of the trim tab planes and actuators. To reduce problems due to marine growth, always return the trim tabs to the full "UP" position after operating the boat and periodically inspect and clean marine growth from the actuators and planes.

The trim tab fluid should be checked often. Keep the fluid level between the marks on the trim tab pump reservoir.

If your Kodiak will be left in saltwater for extended periods, it may be necessary to install zinc anodes on the trim tab planes to prevent galvanic corrosion. Refer to the trim tab owner's manual for additional maintenance information and fluid specifications.

Chapter 3:
FUEL SYSTEM



Fuel System

3.1 General

The gasoline fuel system used in Pursuit boats is designed to meet or exceed the requirements of the U.S. Coast Guard, the Boating Industry Association, and The American Boat and Yacht Council in effect at the time of manufacture.

All gasoline fuel systems have been factory inspected and pressure tested in accordance with regulations in effect at the time of manufacture. This inspection assures that the system is air tight, leak proof and safe. It is the responsibility of the purchaser to maintain it in that condition. Make frequent inspections to assure that no deterioration or loosening of connections is resulting from vibration.

DO NOT LET THE ODOR OF GASOLINE GO UNCHECKED. ANY ODOR OF GASOLINE MUST BE INVESTIGATED IMMEDIATELY AND STEPS TAKEN TO PROTECT THE BOAT AND ITS OCCUPANTS UNTIL THE PROBLEM IS CORRECTED. IF THE ODOR OF GASOLINE IS NOTED, SHUT OFF ALL ENGINES AND ELECTRICAL EQUIPMENT TO INVESTIGATE AND CORRECT THE SITUATION IMMEDIATELY. HAVE ALL PASSENGERS PUT ON PERSONAL FLOTATION DEVICES AND KEEP THE FIRE EXTINGUISHER READY UNTIL THE SITUATION IS RESOLVED.

Fuel Withdrawal Tube

The fuel withdrawal tube is positioned in the fuel tank to achieve optimum fuel usage, fuel line routing, etc. At certain speeds and hull trim angles, the fuel supply at the withdrawal tank location can increase or decrease accordingly. Be extremely careful when attempting to operate the boat when low on fuel. Though some fuel may be in the tank, the relative trim angle of the boat may cause the fuel to flow away from the withdrawal.

Fuel Gauge

This indicates the amount of fuel in the tank. Due to the mechanical nature of the fuel sender, variations in readings during various speeds of operation may occur. This system is merely a relative indication of the available fuel supply and not a calibrated instrument.

Fuel Fill

A fuel fill deck plate is located on the gunnel, and is marked "GAS." The fuel fill is opened by turning it counter clockwise with a special key. After fueling, install the fuel cap and tighten with the key. Be sure to use the proper type and grade fuel. Refer to the engine owner's manual for additional information.

Fuel Fill

Note: Do not overtighten the fuel cap. If the cap is overtightened, the O-ring seal could be damaged allowing water to contaminate the fuel system.

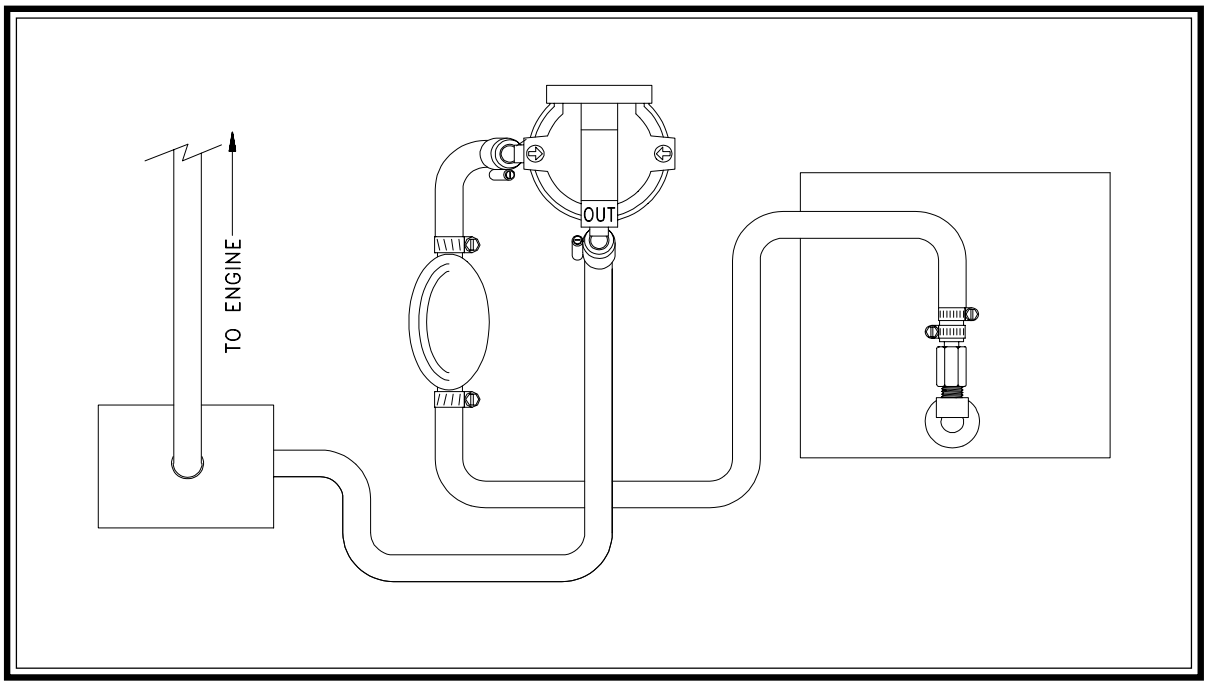
DO NOT CONFUSE FUEL FILL DECK PLATES WITH THE WATER OR WASTE FILL DECK PLATES. THESE PLATES ARE ALSO LABELED ACCORDINGLY. IF GASOLINE OR DIESEL FUEL IS ACCIDENTALLY PUMPED INTO THE WATER OR WASTE TANK, DO NOT ATTEMPT TO PUMP IT OUT YOURSELF. WATER AND WASTE PUMPS ARE NOT DESIGNED TO PUMP FUEL AND A FIRE OR EXPLOSION COULD RESULT. CONTACT YOUR DEALER OR THE PURSUIT CUSTOMER RELATIONS DEPARTMENT FOR ASSISTANCE IN HAVING THE FUEL PROFESSIONALLY REMOVED.

Fuel Vent

The fuel vent is located on the side of the hull. While the tank is being filled, the air displaced by the fuel escapes through the vent. When the tank is full, fuel will be ejected from the fuel vent.

After fueling, replace the fill cap and wash the areas around the fuel fill deck plate and below the fuel vent. Residual fuel left on the deck and hull sides can be dangerous and will yellow the fiberglass or damage the striping.

3.2 Outboard Fuel System



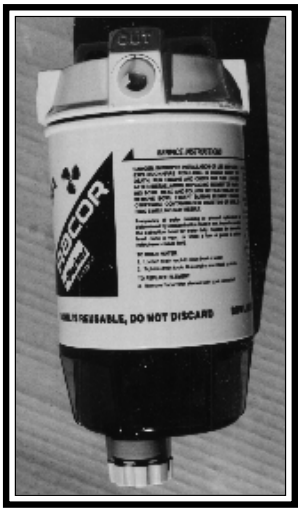
Outboard Fuel System

The fuel system on the 22 Kodiak has one fuel tank. The fuel tank is mounted in the center of the bilge and has one withdrawal line equipped with an anti-siphon valve where the fuel line attaches to the fuel tank. This valve prevents gasoline from siphoning out of the fuel tank should a line rupture.

DO NOT REMOVE THE ANTI-SIPHON VALVE FROM THE SYSTEM. SHOULD THE VALVE BECOME CLOGGED, CLEAN AND REINSTALL OR REPLACE.

Single Engine Fuel System

A fuel filter is installed in the transom area of the boat. The filter is the water separator type and has a sediment bowl that should be checked for water frequently to assure an adequate supply of clean, dry fuel to the engines. It is recommended that the filter be inspected periodically and the element changed as needed.



Fuel Filter

3.3 Fueling Instructions

FUEL IS VERY FLAMMABLE. BE CAREFUL WHEN FILLING THE FUEL TANK. NO SMOKING. NEVER FILL THE TANK WHILE THE ENGINE IS RUNNING. FILL THE FUEL TANK IN AN OPEN AREA. DO NOT FILL THE TANK NEAR OPEN FLAMES.

TO PREVENT DAMAGE TO THE FUEL SYSTEM, USE ONLY A GOOD GRADE OF GASOLINE. DO NOT USE A FUEL THAT CONTAINS HARSH ADDITIVES OR IS AN ALCOHOL BLEND. ANY DAMAGE DONE TO THE FUEL SYSTEM THAT IS THE RESULT OF USE OF AN ALCOHOL BLEND, IS NOT COVERED BY THE PURSUIT KODIAK WARRANTY. REFER TO THE ENGINE MANUFACTURER OWNER'S MANUAL REGARDING FUEL REQUIREMENTS FOR YOUR ENGINE.

To fill the fuel tank at a marina, follow this procedure:

1. Make sure all switches are in the "OFF" position.
2. Make sure the boat is securely moored.
3. Make sure all passengers leave the boat.
4. Estimate how much fuel is needed and avoid filling the tank to the point where fuel comes out of the fuel vent.

Note: When the fuel tank is full, fuel will come out through the fuel vent. The fuel vent is located on the port side of the boat.

5. A special key to open the fuel cap is supplied.
6. Turn the key counterclockwise to open the cap.
7. Remove the cap.
8. Put the nozzle in the fuel opening.

STATIC ELECTRICITY CAN BE GENERATED WHILE FUELING AND CAN CAUSE A FIRE OR EXPLOSION. TO PREVENT STATIC SPARKS WHEN FILLING THE TANK, MAKE SURE THE NOZZLE IS IN CONTACT WITH THE FUEL OPENING.

SPILLED FUEL IS DANGEROUS AND CAN YELLOW FIBERGLASS OR IGNITE. MAKE SURE YOU DO NOT SPILL ANY FUEL. IF FUEL IS SPILLED ON THE DECK, USE A CLOTH TO REMOVE THE FUEL AND PROPERLY DISPOSE OF THE CLOTH. IF FUEL IS SPILLED ON THE WATER, EXERCISE EXTREME CAUTION. FUEL FLOATS ON TOP OF THE WATER AND CAN IGNITE. IF EXCESS FUEL IS SPILLED INTO THE WATER, IMMEDIATELY EVACUATE THE AREA AND NOTIFY THE MARINA AND THE PROPER OFFICIALS.

9. Fill the fuel tank to near full. Allow just enough room for the fuel to expand without leaking out the vent.

10. Remove the nozzle.

11. Install and tighten the fuel cap. Be careful not to overtighten the cap.

12. Check the fuel compartment and below the deck for fuel odors. If you smell fuel, do not start the engine.

TO REDUCE THE RISK OF A FIRE AND/OR EXPLOSION, DO NOT START THE ENGINE WHEN FUEL FUMES ARE PRESENT. FUEL FUMES ARE DANGEROUS AND HARMFUL TO YOUR HEALTH.

MAKE SURE ALL GASOLINE ODORS ARE INVESTIGATED IMMEDIATELY.

3.4 Fuel System Maintenance

Periodically inspect all connections, clamps and hoses for leakage and damage or deterioration. Replace as necessary. Spray the valves, fuel gauges and ground connections with a metal protector.

Frequently inspect and lubricate the fuel fill cap O-ring seal with petroleum jelly. The O-ring seal prevents water from entering the fuel system through the fuel fill cap and it should be replaced immediately if there is any sign of damage or deterioration.

Periodically, remove the cover from the fuel vent and clean the vent of any debris. Be sure the cover is replaced securely after cleaning. The cover helps prevent water and other foreign matter from contaminating the fuel and fuel system. If a vent cover is damaged or lost it should be replaced as soon as possible.

Contaminated fuel may cause serious damage to your engine. The filter must be checked for water and other contamination frequently. The filter element must be changed at least once a season or

more frequently depending on the type of engine and the quality of the fuel. Please refer to the engine or fuel filter manufacturer's instructions for information on servicing and replacing the fuel filter element.

The age of gasoline can affect engine performance. Chemical changes occur as the gasoline ages that can cause deposits and varnish in the fuel system as well as reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month, a fuel stabilizer should be added to the gasoline to protect the fuel from degradation. Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engine.

Avoid using fuels with alcohol additives. Gasoline that is an alcohol blend will absorb moisture from the air which can reach such concentrations that "phase separation" can occur whereby the water and alcohol mixture becomes heavy enough to settle out of the gasoline to the bottom of the tank. Since the fuel pick up tube is very near the bottom of the tank, phase separation can cause the engine to run very poorly or not at all. This condition is more severe with methyl alcohol and will worsen as the alcohol content increases. Water or a jelly like substance in the fuel filters are an indication of possible phase separation from the use of alcohol blended fuels.

DO NOT DRAIN ANY FUEL INTO THE BILGE. THIS COULD LEAD TO A FIRE OR EXPLOSION.

AFTER THE FILTER ELEMENT HAS BEEN CHANGED, PRIME THE FUEL SYSTEM AND CHECK ALL FITTINGS FOR LEAKS BEFORE AND AFTER STARTING THE ENGINE.

Chapter 4:
ELECTRICAL SYSTEM

4.1 General

Your boat is equipped with a 12-volt D.C. electrical system that draws current from on-board batteries.

The 12-volt batteries in your boat are usually the lead-acid type. They will require maintenance similar to those found in automobiles. The batteries are located just forward of the fuel tank and accessed through a door in the cabin below the companionway door. The battery switch and primary circuit breakers are located in the transom area behind the starboard access hatch.

There are electrical schematics included in this manual to aid in following an individual circuit of the boat.

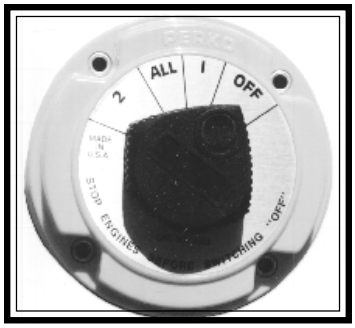
4.2 12-Volt System

The 12-volt system is a fairly standard system. There are two batteries controlled by one battery switch. The batteries are charged by the engine. All 12-volt power is distributed to the 12-volt accessories through individual circuit breakers located in the 12-volt switch panels. A main circuit breaker located near the battery switch protects the system from an overload. Another circuit breaker near the switch protects the circuit for the automatic float switch for the bilge pump. Most 12-volt accessories are operated directly by switches in the helm and accessory switch panels.

PROPER FUSE OR BREAKER PROTECTION MUST BE PROVIDED FOR ALL 12-VOLT EQUIPMENT ADDED. DO NOT OVERLOAD THE ACCESSORY CIRCUIT BREAKERS OR OTHER CIRCUITRY THROUGH ADDITIONAL 12-VOLT EQUIPMENT.

Single Engine Battery System

The battery selector switch is located in the transom area of the boat. The switch feeds the engine and the 12-volt accessory panel. 12-volt power can be supplied by either battery # 1 or battery # 2 separately or by both batteries simultaneously. The selector switch also directs the charging current when the engine is operating.



Battery Switch

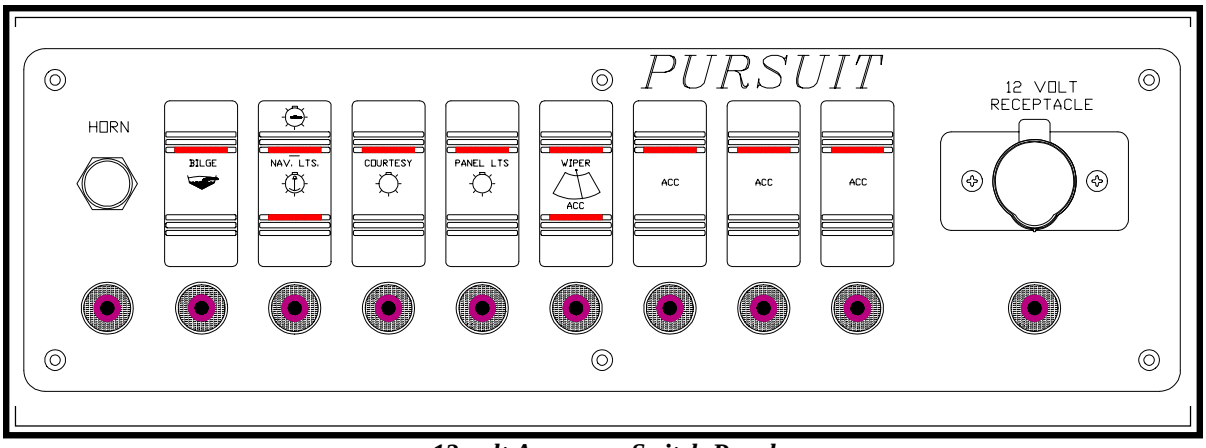
For example: When the switch is on battery # 1, the engine and the 12-volt system will be supplied power by battery # 1. Battery # 2 will be isolated and in reserve. Battery # 1 will be charged by the

alternator. When the selector switch is on battery # 2, the engine and the 12-volt system will be supplied power by battery # 2. Battery # 1 will be isolated and in reserve. Battery # 2 will then be charged by the alternator.

When the selector switch is on "ALL," the batteries are connected in parallel so the engine and the 12-volt system will be supplied power by both batteries. Both batteries will be charged by the alternator. The "ALL" position should only be used when starting the engine, as this requires extra electrical power, or when both batteries are low and need charging. Otherwise, it is recommended that the selector switch be set on battery # 1 or battery # 2 when the engine is operating. While in port, or at anchor, the battery selector switch should be on either the battery # 1 or the battery # 2 position. This will keep one battery in reserve for starting the engine. The battery switch should be turned to the "OFF" position when leaving the boat unattended.

12-Volt Accessory Switch Panels

The main accessory switch panel is located at the helm. The circuit breakers that protect the accessories are located directly under the switches.



12-volt Accessory Switch Panel

The following is a description of the accessories controlled by the main accessory switch panel:

Horn

Activates the boat horn.

Bilge Pump

The bilge pump is installed in the rear center of the bilge. The pump moves water out through the thru-hull fitting in the hull. To start the pump manually, put the switch in the "ON" position.

Note: The bilge pump will start automatically when there is sufficient water in the bilge to activate the float switch. The float switch is protected by a circuit breaker located near the battery selector switch and is always supplied current when the batteries are connected.

Anchor-Nav Lights
The switch is a three-position switch. The middle position is "OFF". Moving the switch in one direction will activate the navigation lights. Moving the switch in the opposite direction activates the anchor light.

Courtesy Lights
Activates the lights that illuminate the cockpit area.

Panel Lights
Activates the engine gauge and compass lights.

Windshield Wiper
Activates the standard starboard windshield wiper and the optional port windshield wiper if it is installed on your boat.

12-Volt Receptacle
Provides electrical current for portable 12-volt equipment.

Accessory Switches (3)
These switches are supplied to activate additional equipment that may have been installed by Pursuit or your Pursuit dealer. If no accessories are activated by these switches, they remain wired in the panel in reserve. Some accessories that may be connected to the accessory switches are: The spreader lights, electronics and livewell.

Additional Switch Panels
Additional switch panels may be located in various locations in the cockpit and helm area of the boat. Most of these panels are equipped with one switch and one circuit breaker. The following is a description of additional panels that may be on your boat and the accessories they control:

Washdown Switch
This switch activates the raw water washdown pump. The pump is the pressure demand type and is protected by a circuit breaker in the panel and an automatically resetting breaker on the pump motor.

Livewell Switch
This switch activates the baitwell circulating pump that supplies water to the baitwell.

Freshwater
Activates the freshwater pump pressure switch located on the pump. The pressure switch automatically controls the water pump when the system is activated and properly primed. It is protected by a circuit breaker in the panel and an automatically resetting breaker on the pump motor.

Trim Tab Switch (Optional)
Located in the helm. This switch controls the optional trim tab planes located on the transom of the boat. It is protected by a 15-amp breaker located behind the helm at the back of the accessory switch. Please refer to Chapter 2 for detailed information on the operation of the trim tab controls.

4.3 Electrical System Maintenance

DC Electrical System Maintenance
At least once a year, spray all exposed electrical components behind the helm and in the plugs, with a protector. Exterior light fixture bulbs should be removed and the metal contact areas coated with a non-water soluble lubricant like petroleum jelly. The sockets should be sprayed with a protector. Care must be taken not to get any oil or petroleum jelly on the glass portion of the bulbs as this will cause the bulb to overheat and burn out.

WHEN REPLACING LIGHT BULBS IN MARINE LIGHT FIXTURES, ALWAYS USE A BULB WITH THE SAME RATING AS THE ORIGINAL. USING A DIFFERENT BULB COULD CAUSE THE FIXTURE TO OVERHEAT AND MELT OR SHORT CIRCUIT.

Inspect all wiring for proper support, sound insulation, and tight terminals, paying particular attention to portable appliance cords and plugs.

Check all below deck wiring to be sure it is properly supported, that the insulation is sound, and that there are no loose or corroded terminals. Corroded terminals should be thoroughly cleaned with sandpaper, or replaced, tightened securely and sprayed with a metal and electrical protector. Inspect all engine wiring.

Check the electrolyte level in the batteries regularly and add distilled water as necessary. If the batteries are frequently charged by an automatic battery charger, the electrolyte level will have to be checked more often. Keep the battery tops clean and dry. Dirt and water can conduct electricity from one post to the other causing the battery to discharge.

The battery posts should be kept free of corrosion. Remove the cables and clean the posts and cable clamps with a battery post cleaner or sandpaper as required. Coating the battery posts and cable clamps with petroleum jelly or silicone grease will protect them and reduce corrosion. Battery cables, both hot and ground, must be replaced when they show signs of corrosion or fraying. Deteriorated cables cause a considerable voltage loss when high currents are drawn, as for starting the engine.

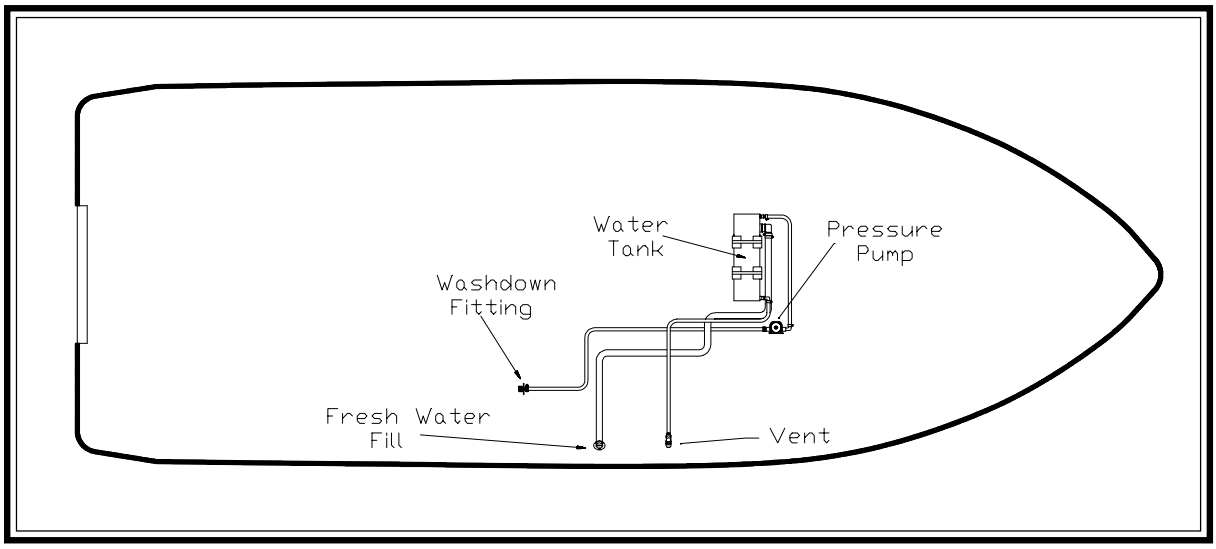
NEVER USE AN OPEN FLAME IN THE BATTERY STORAGE AREA. AVOID STRIKING SPARKS NEAR THE BATTERY. A BATTERY CAN EXPLODE IF A FLAME OR SPARK IGNITES THE HYDROGEN GAS THE BATTERY EMITS WHILE BEING CHARGED.

CORROSION ALLOWED TO BUILD ON THE ELECTRICAL CONNECTORS CAN CAUSE A POOR CONNECTION RESULTING IN SHORTS, GROUND FAULTS OR POOR GROUND CONNECTIONS. ELECTRICAL CONNECTORS SHOULD BE CHECKED AT LEAST ANNUALLY AND CLEANED AS REQUIRED. DO NOT ALLOW CORROSION TO BUILD ON CONNECTIONS.

THE ELECTRICAL SYSTEM ALWAYS SHOULD BE DISCONNECTED FROM THE POWER SOURCE BEFORE INSPECTING OR SERVICING THE SYSTEM. NEVER SERVICE ANY COMPONENT OF AN ELECTRICAL SYSTEM WHILE IT IS ENERGIZED.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Chapter 5:
FRESHWATER SYSTEM



Raw Water System

5.1 General

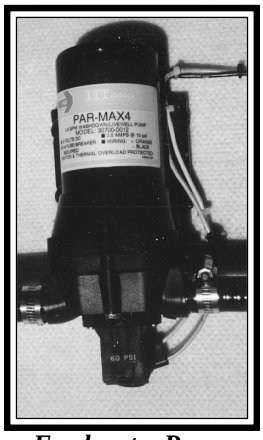
The freshwater washdown is optional and consists of a potable water tank, distribution lines and a distribution pump. The tank is filled through a labeled deck plate located on the side of the gunnel.

DO NOT FILL SYSTEM WITH ANYTHING OTHER THAN WATER. SHOULD THE SYSTEM BECOME CONTAMINATED WITH FUEL OR OTHER TOXIC FLUIDS, COMPONENT REPLACEMENT MAY BE NECESSARY.

DO NOT CONFUSE FUEL FILL DECK PLATES WITH THE WATER OR WASTE FILL DECK PLATES. THESE PLATES ARE ALSO LABELED ACCORDINGLY. IF GASOLINE OR DIESEL FUEL IS ACCIDENTALLY PUMPED INTO THE WATER OR WASTE TANK, DO NOT ATTEMPT TO PUMP IT OUT YOURSELF. WATER AND WASTE PUMPS ARE NOT DESIGNED TO PUMP FUEL AND A FIRE OR EXPLOSION COULD RESULT. CONTACT YOUR DEALER OR THE PURSUIT CUSTOMER RELATIONS DEPARTMENT FOR ASSISTANCE IN HAVING THE FUEL PROFESSIONALLY REMOVED AND COMPONENTS OF THE FRESHWATER SYSTEM REPLACED AS NECESSARY.

5.2 Freshwater Washdown Operation

Fill the water supply tank slowly through the labeled deck plate.



Freshwater Pump

After filling the water tank, open the hose connector for the freshwater washdown. The freshwater switch on the 12-volt panel should be on. Allow the pump to run until all of the air is purged from the system and a steady stream of water is flowing from the outlet. Turn the pump off and close the outlet or install the washdown hose.

When activated, the pressure switch will automatically control the pump. As the pressure builds in the washdown hose, the pump will shut off. When the washdown hose is in use and the pressure drops, the pump will turn on. If the system has been recently filled or has not been used for an extended period, air bubbles may accumulate at the pump and the system may have to be reprimed. Whenever the boat is left unattended, the freshwater pump switch should be placed in the "OFF" position.

DO NOT ALLOW THE FRESHWATER PUMP TO RUN DRY. THIS CAN RESULT IN DAMAGE TO THE PUMP.

Washdown Hose Connector

The Washdown Pump Connection

The washdown pump hose connection is located in the cockpit and uses a standard garden hose connection.

5.3 Freshwater System Maintenance

Information supplied with water system components, by the equipment manufacturers, is included with this manual. Refer to this information for additional operation and service data.

The following items should be done routinely to maintain your freshwater system:

- Periodically, remove the cover from the water tank vent and clean the vent of any debris. Be sure the covers are replaced securely after cleaning. The covers help prevent foreign matter and seawater from contaminating the water system. If the vent cover is damaged or lost it should be replaced as soon as possible.

- Periodically spray the pumps and metal components with a metal protector.

- The batteries must be properly maintained and charged. Operating the pressure pump from a battery with a low charge could lead to pump failure.

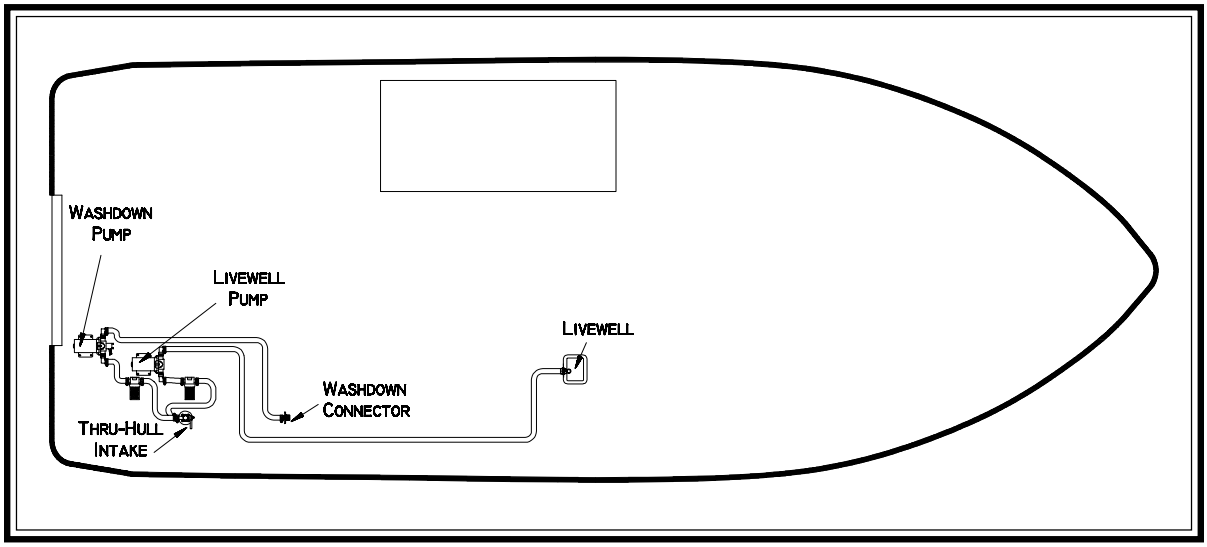
- Add a commercially available potable water conditioner to the water tank to keep it fresh.

THE FRESHWATER SYSTEM MUST BE PROPERLY WINTERIZED PRIOR TO WINTER LAY-UP. SEE SECTION ON WINTERIZING.

THE WATER PRESSURE SWITCH SHOULD BE PLACED IN THE "OFF" POSITION WHENEVER LEAVING THE BOAT UNATTENDED OR WHEN THE FRESHWATER SYSTEM IS NOT IN USE.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Chapter 6:
RAW WATER SYSTEM



Raw Water System

6.1 General

In the raw or seawater systems, all water pumps are supplied by hoses connected to ball valves and thru hull fittings located in the bilge compartment. Generally, the ball valves are open when the handles are parallel with the water flow. Always make sure the ball valves are open before attempting to operate any component of the raw water system. 12-volt pumps supply seawater to the various accessories.

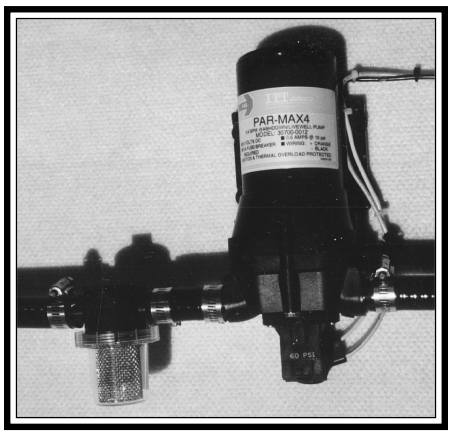
Priming the System

Make sure the ball valves are open. Open the hose connector for the raw water washdown and activate the pressure pump by turning the washdown pump switch to the "ON" position. Run the pump until all of the air is purged from the system and then turn the switch off. Turn the livewell switch to the "ON" position. Run the pump until all of the air is purged from the system and then turn the switch to the "OFF" position. Closing the thru hull ball valves before the boat is hauled from the water will help to eliminate air locks in raw water systems.

Note: It may be necessary to reprime the raw water system if the system is not used for an extended period and at the time of launching.

6.2 High Pressure Washdown (Optional)

A saltwater high pressure pump, controlled by a pressure sensor, supplies the raw water hose connector located in the cockpit. The pump is activated by the washdown switch located below the starboard bolster in the cockpit. This switch should be turned to the "ON" position just before using the washdown and be turned to the "OFF" position when the washdown is not in use.



Washdown Pump

When activated, the pressure switch will automatically control the pump. As the pressure builds in the washdown hose, the pump will shut off. When the washdown hose is in use and the pressure drops, the pump will turn on.

The raw water washdown system is equipped with a sea strainer located on the intake side of the pump. This should be checked frequently and cleaned as necessary.

The Washdown Pump Connection

The washdown pump hose connection is located in the cockpit and uses a standard garden hose connection.

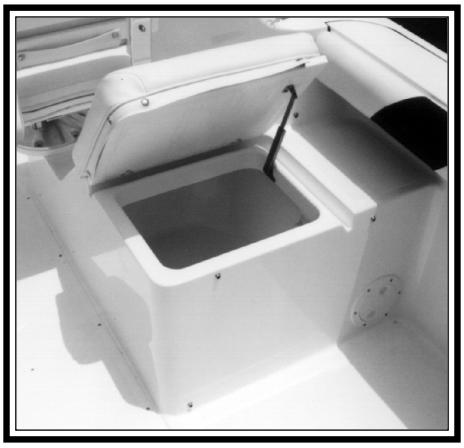
Washdown Hose Connector

ALWAYS TURN THE RAW WATER PUMP SWITCH TO THE "OFF" POSITION WHEN LEAVING THE BOAT UNATTENDED.

DO NOT RUN THE HIGH PRESSURE PUMP DRY FOR EXTENDED PERIODS AS DAMAGE TO THE PUMP WILL RESULT.

6.3 Livewell

Seawater is provided to the livewell by a 12-volt circulation pump. This pump is designed to carry a constant flow of water to the livewell. The pump is not equipped with a pressure sensor and is activated by the livewell switch below the starboard bolster in the cockpit.



Livewell

An overflow built into the livewell automatically controls the water level in the livewell. Always turn the pump "OFF" at the switch panel when the livewell is not in use.

To fill the livewell, insert the plug into the drain fitting at the bottom of the livewell and activate the livewell switch. When the water level reaches the overflow, it will begin to circulate.

To drain the livewell, turn off the livewell pump and pull out the plug in the drain fitting at the bottom of the livewell. When the livewell has completely drained, use the washdown hose to flush the livewell and drain of debris.

The livewell supply thru hull valve should be closed whenever the livewell is not in use. This will prevent water from entering the livewell while the boat is cruising.

The livewell system is equipped with a sea strainer on the intake side of the pump located in the bilge behind the stern access hatch. This should be checked frequently and cleaned as necessary.

Note: Do not use the livewell as a dry storage area when it is not in use. Seawater could accidently be delivered to the livewell from the thru hull and damage equipment stored there.

6.4 Raw Water System Maintenance

The following items should be done routinely to help maintain your raw water system:

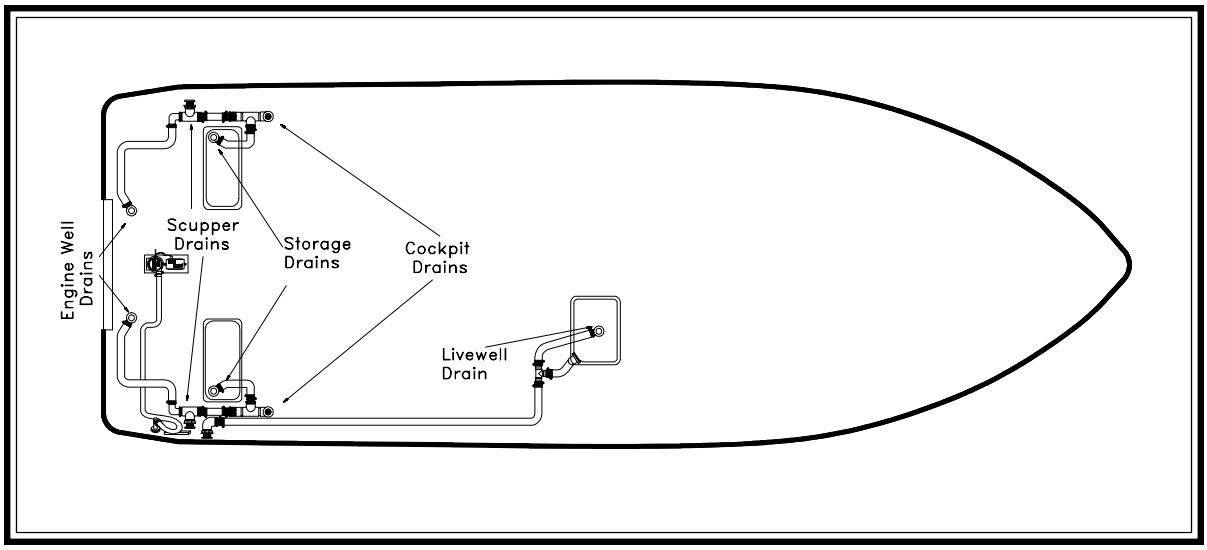
- Check hoses, particularly the seawater supply line, for signs of deterioration.
- Remove and clean the seawater strainers.
- Spray pumps and thru hull valves with a protective oil periodically.
- The fishboxes and livewells should be drained and cleaned after each use.
- Operate all thru hull valves at least once a month to keep them operating properly.

SHOULD A HOSE RUPTURE, TURN THE PUMP OFF IMMEDIATELY. ALWAYS CLOSE THE THRU HULL VALVE WHEN PERFORMING MAINTENANCE ON A SEAWATER PUMP.

THE BATTERIES MUST BE PROPERLY CHARGED. OPERATING ANY PUMPS FROM A BATTERY WITH A LOW CHARGE MAY LEAD TO A PUMP FAILURE.

THE RAW WATER SYSTEM MUST BE PROPERLY WINTERIZED PRIOR TO WINTER LAY-UP. SEE SECTION ON WINTERIZING.

Chapter 7:
DRAINAGE SYSTEMS



Drainage System

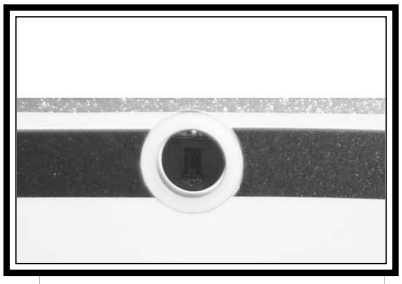
7.1 Cabin Sole and Cockpit Drainage

Cabin Sole

A drain plug in the cabin sole is provided to drain water that may accumulate on the cabin floor. This plug keeps the engine compartment isolated from the cabin and should be removed only to drain water from the cabin floor and reinstalled when the draining is complete.

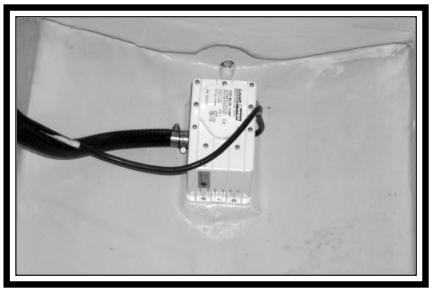
Cockpit

Your boat has two scupper drains located on each side of the hull, near the waterline, to provide drainage for the cockpit. Water is channeled away from all opening hatches by a gutter or drain rail system. The water then drains overboard through the scuppers.



Scupper

7.2 Bilge Drainage



Bilge Pump

The bilge pump is activated both manually, by a switch in the helm station, and automatically by a float switch built into the pump. The automatic float switch remains activated when the battery switch is in the "OFF" position. All bilge pumps pump water out of thru hulls located above the waterline in the hull.

Note: See Electrical Systems for additional information on bilge pump operation.

IMPORTANT: Any oil spilled in the bilge must be thoroughly removed and properly disposed of before operating the bilge pump. The discharge of oil from the bilge is illegal and subject to a fine.

When the boat is out of the water the bilge can be drained by a thru hull drain located in the transom near the bottom of the hull. The plug should be removed whenever the boat is hauled out of the water and installed just prior to launching. It is important to check the drain plug regularly to make sure it is tight.

A LOOSE DRAIN PLUG WILL ALLOW SEAWATER TO ENTER THE BILGE AND COULD CAUSE THE BOAT TO SINK. IT IS VERY IMPORTANT TO CHECK THE DRAIN PLUG FREQUENTLY TO ENSURE IT IS PROPERLY TIGHTENED.

THE FEDERAL WATER POLLUTION CONTROL ACT PROHIBITS THE DISCHARGE OF OIL OR OILY WASTE INTO OR UPON THE NAVIGABLE WATERS OF THE UNITED STATES OR THE WATERS OF THE CONTIGUOUS ZONE IF SUCH DISCHARGE CAUSES A FILM OR SHEEN UPON, OR A DISCOLORATION OF THE SURFACE OF THE WATER, OR CAUSES A SLUDGE OR EMULSION BENEATH THE SURFACE OF THE WATER. VIOLATORS ARE SUBJECT TO A PENALTY OF $5,000.

CERTAIN BULKHEAD AREAS ARE SEALED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS THAT WERE IN EFFECT AT THE DATE OF MANUFACTURE OF THE BOAT. ANY MODIFICATIONS TO THESE BULKHEADS SHOULD BE IN ACCORDANCE WITH THE U.S. COAST GUARD REGULATIONS.

7.3 Fishboxes/Coolers and Livewell Drains

Cooler and Optional Livewell
A cooler or optional livewell is located behind the helm seat and drained by gravity to overboard thru hull fittings located in the hull sides just above the water line. The overflow in the livewell drains into the overboard drains.

Transom Coolers / Fishbox Drains
The transom coolers / fishboxes drain by gravity to overboard thru hulls located in the hull sides just above the waterline. The boxes are insulated and should be flushed out and cleaned after each use.

7.4 Rope Locker Drain

The rope locker drains into the bilge through a drain located in the bottom of the rope locker. It is important to inspect the drain frequently to remove any accumulated debris.

7.5 Maintenance

It is essential that the following items be done periodically to maintain proper drainage of your boat:

- Clean the cockpit drain rails with a hose to remove debris that can block water drainage.
- Clean the bilge pump strainer of debris and check the bilge for foreign material that can cause the automatic switch to malfunction.
- Frequently test the automatic bilge pump switch for proper operation. This is accomplished by inserting a stiff wire or small rod through one of the slots in the float chamber of the pump and lifting the float switch until the pump turns on. You can also use a hose to flood the bilge until the water level is high enough to activate the pump.
- Flush all gravity drains with fresh water to keep them clean and free flowing.
- Clean and flush the coolers / fishboxes and livewells with soap and fresh water or a bilge cleaner after each use to keep them clean and fresh.

ALL DRAINS AND PUMPS MUST BE PROPERLY WINTERIZED BEFORE WINTER LAY-UP.

NEVER USE HARSH CHEMICAL DRAIN CLEANERS IN MARINE DRAIN SYSTEMS. PERMANENT DAMAGE TO THE HOSES AND FITTINGS MAY RESULT.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Chapter 8:
VENTILATION SYSTEM

8.1 Cabin Ventilation

Ventilation to the cabin areas is provided by a deck hatch and louvers in the cabin doors.

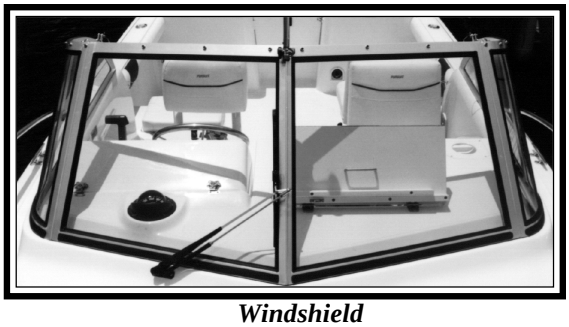
Cabin Door

The deck hatch is supported in the open position by an adjustable hatch adjuster. To close the hatch, loosen the knob on the hatch adjuster and close the hatch. Secure in the closed position with the two cam levers on the inside of the hatch.

Forward Deck Hatch

8.2 Windshield Ventilation

The windshield is equipped with an opening vent panel on each side of the windshield. To open the vent, release the locking T-handle and open the vent to the desired position. Lock the vent in place by turning the T-handle 1/4 turn. The friction of the T-handle in the guide will hold the vent in that position.



Windshield

8.3 Carbon Monoxide and Ventilation

CARBON MONOXIDE IS A LETHAL, TOXIC GAS THAT IS COLORLESS AND ODORLESS. IT IS A DANGEROUS GAS THAT WILL CAUSE DEATH IN CERTAIN LEVELS.

FAILURE TO PROPERLY VENTILATE THE BOAT WHILE THE ENGINE IS RUNNING MAY PERMIT CARBON MONOXIDE TO ACCUMULATE WITHIN THE CABIN. CARBON MONOXIDE IS A COLORLESS AND ODORLESS GAS THAT IS LETHAL WHEN INHALED. CARE MUST BE TAKEN TO PROPERLY VENTILATE THE BOAT AND TO AVOID CARBON MONOXIDE FROM ACCUMULATING IN THE BOAT WHENEVER THE ENGINE IS RUNNING.

A by-product of combustion, carbon monoxide (CO) is invisible, tasteless, odorless, and is produced by all engines, heating and cooking appliances. The most common sources of CO on boats are gasoline engines, auxiliary generators and propane or butane stoves. These produce large amounts of CO and should never be operated while sleeping. The hazard also may be created by a boat nearby whose exhaust fumes are entering your boat. Boats also have a problem do to the "station wagon effect" where engine exhaust fumes are captured in the vacuum or low pressure area, usually the cockpit, bridge deck and cabin, that can be created by the forward speed of the boat.

Boats underway should close all aft facing hatches and doors. The forward facing deck hatches should be open whenever possible to help pressurize the living spaces of the boat. No sleeping in the cabin should be permitted while underway. Proper ventilation should be maintained on the bridge deck by opening windshield vents as far as possible to help pressurize the cockpit area. The canvas drop or aft curtain must be removed and the side curtains should be opened or removed to increase air flow and maintain proper ventilation whenever the engines are running. ***Under no circumstances should the engines be operating with side curtains closed and the aft or drop curtain installed.***

Extreme caution must be taken while at anchor or in a slip when an auxiliary power generator is operating. Wind still nights can easily allow exhaust fumes, containing high concentrations of CO, from the generator on your boat or from an adjacent boat's generator to enter the boat. The exhaust fumes may enter your boat through open hatches or windows.

A carbon monoxide detector has been installed in your cabin as standard equipment. While a CO detector enhances your protection from CO poisoning, it does not guarantee it will not occur. Do not use the carbon monoxide detector as a replacement for ordinary precautions or periodic inspections of equipment. Never rely on alarm systems to save your life, common sense is still prudent and necessary. Remember, the operator of the boat carries the ultimate responsibility to make sure the boat is properly ventilated and the passengers are not exposed to dangerous levels of carbon monoxide. You always should be alert to the symptoms and early warning signs of carbon monoxide poisoning. You also should read the book entitled "Sportfish, Cruisers, Yachts"

included with this manual, the "Carbon Monoxide Detector" in the Safety Equipment Chapter of this manual, and the owner's manual supplied by the CO detector manufacturer, for operation instructions and additional information regarding the hazards and symptoms of carbon monoxide poisoning.

ACTUATION OF THE CARBON MONOXIDE DETECTOR INDICATES THE PRESENCE OF CARBON MONOXIDE (CO) WHICH CAN BE FATAL. EVACUATE THE CABIN IMMEDIATELY. DO A HEAD COUNT TO CHECK THAT ALL PERSONS ARE ACCOUNTED FOR. DO NOT REENTER THE CABIN UNTIL IT HAS BEEN AIRED OUT AND THE PROBLEM FOUND AND CORRECTED.

8.4 Maintenance

- Periodically lubricate all hinges and latch assemblies with a light oil.

- Periodically clean and coat gasket materials with silicone to help keep them pliable.

- The opening cabin deck hatch and port windows are made of acrylic plastic glass. Acrylic glass scratches easily. Never use a dry cloth or glass cleaning solutions on acrylic glass . Use a soft cloth and mild soap and water for routine cleaning. Solvents and products containing ammonia can permanently damage acrylic glass. Please refer to the Routine Maintenance chapter for more information on the proper maintenance for acrylic plastic glass.

- Periodic inspection and cleaning of the bilge vents is necessary to ensure adequate air circulation.

- Periodically return the carbon monoxide alarm to the manufacturer for testing and recalibration. Please refer to the carbon monoxide alarm manual or contact the manufacturer for more information on maintaining and calibrating the alarm.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Chapter 9:
SAFETY EQUIPMENT

9.1 General

Your boat and outboard engine have been equipped with safety equipment designed to enhance the safe operation of the boat and to meet U.S. Coast Guard safety standards. The Coast Guard or state, county, and municipal law enforcement agencies require certain additional accessory safety equipment on each boat. This equipment varies according to length and type of boat and type of propulsion. The accessory equipment required by the Coast Guard is described in this chapter. Some local laws require additional equipment. It is important to obtain "Federal Requirements and Safety Tips for Recreational Boats," published by the Coast Guard, and copies of state and local laws, to make sure you have the required equipment for your boating area. You should also read the book entitled "Sportfish, Cruisers and Yachts" included with your boat.

The 2270 Kodiak could be equipped with engine alarms. These systems are designed to increase your boating safety by alerting you to potentially serious problems in the primary power systems. Alarm systems are not intended to lessen or replace good maintenance and precruise procedures.

This chapter also describes safety related equipment that could be installed on your boat. This equipment will vary depending on the type of engine and other options installed by you or your dealer.

9.2 Engine Alarms

Most outboard engines are equipped with an audible alarm system mounted in the helm area that monitors selected critical engine systems. The alarm will sound if one of these systems begins to fail. Refer to the engine owner's manual for information on the alarms installed with your engine.

If the alarm sounds:

- Immediately throttle the engine back to idle.
- Shift the transmission to neutral.
- Monitor the engine gauges to determine the cause of the problem.
- If necessary, shut off the engine and investigate until the cause of the problem is found.

9.3 Neutral Safety Switch

Every control system has a neutral safety switch incorporated into it. This device prohibits an engine from being started while the shift lever is in any position other than the neutral position. If the engine will not start, slight movement of the shift lever may be necessary to locate the neutral position and disengage the safety cutout switch. Control or cable adjustments may be required to correct this condition should it persist. See your Pursuit dealer for necessary control and cable adjustments. Please refer to the Helm Control Systems chapter for more information on the neutral safety switch.

9.4 Engine Stop Switch

Your boat is equipped with a engine stop switch and lanyard. When the lanyard is pulled it will engage the switch and shut off the engine. We strongly recommend that the lanyard be attached to the driver whenever the engine is running. If the engine will not start, it could be because the lanyard is not properly inserted into the engine stop switch. Always make sure the lanyard is properly attached to the engine stop switch before attempting to start the engine.

9.5 Required Safety Equipment

Besides the equipment installed on your boat by Pursuit, certain other equipment is required by the U.S. Coast Guard to help ensure passenger safety. Items like a sea anchor, working anchor, extra dock lines, flare pistol, life vests, a line permanently secured to your ring buoy, etc. could at some time save your passengers' lives, or save your boat from damage. Refer to the "Federal Requirements and Safety Tips for Recreational Boats" pamphlet for a more detailed description of the required equipment. You can also contact the U.S. Coast Guard Boating Safety Hotline, 800-368-5647 or 800-336-2628 and 800-245-2628 in Virginia, for information on boat safety courses and brochures listing the Federal equipment requirements. Also, check your local and state regulations.

The Coast Guard Auxiliary offers a "Courtesy Examination." This inspection will help ensure that your boat is equipped with all of the necessary safety equipment.

The following is a list of the accessory equipment required on your boat by the U.S. Coast Guard:

<u>Personal Flotation Devices</u> (PFDs)
PFDs must be Coast Guard approved, in good and serviceable condition, and of appropriate size for the intended user. Wearable PFDs must be readily accessible, meaning you must be able to put them on in a reasonable amount of time in an emergency. Though not required, the Coast Guard emphasizes that PFDs should be worn at all times when the vessel is underway. Throwable devices must be immediately available for use. All Pursuit boats must be equipped with at least one Type

I, II or III PFD for each person on board, plus one throwable device (Type IV). Some states have special PFD requirements for children. Make sure you know and follow the laws for your boating area.

Visual Distress Signals

All Pursuit boats used on coastal waters, the Great Lakes, territorial seas, and those waters connected directly to them, must be equipped with Coast Guard approved visual distress signals. These signals are either Pyrotechnic or Non-Pyrotechnic devices.

Pyrotechnic Visual Distress Signals

Pyrotechnic visual distress signals must be Coast Guard approved, in serviceable condition, and readily accessible. They are marked with a date showing the service life, which must not have expired. A minimum of three are required. Some pyrotechnic signals meet both day and night use requirements. They should be stored in a cool, dry location. They include:

- Pyrotechnic red flares, hand held or aerial.
- Pyrotechnic orange smoke, hand-held or floating.
- Launchers for aerial red meteors or parachute flares.

PYROTECHNICS ARE UNIVERSALLY RECOGNIZED AS EXCELLENT DISTRESS SIGNALS. HOWEVER, THERE IS POTENTIAL FOR INJURY AND PROPERTY DAMAGE IF NOT PROPERLY HANDLED. THESE DEVICES PRODUCE A VERY HOT FLAME AND THE RESIDUE CAN CAUSE BURNS AND IGNITE FLAMMABLE MATERIAL. PISTOL LAUNCHED AND HAND-HELD PARACHUTE FLARES AND METEORS HAVE MANY CHARACTERISTICS OF A FIREARM AND MUST BE HANDLED WITH CAUTION. IN SOME STATES THEY ARE CONSIDERED A FIREARM AND PROHIBITED FROM USE. ALWAYS BE EXTREMELY CAREFUL AND FOLLOW THE MANUFACTURER'S INSTRUCTIONS EXACTLY WHEN USING PYROTECHNIC DISTRESS SIGNALS.

Non-Pyrotechnic Devices:

Non-Pyrotechnic visual distress signals must be in serviceable condition, readily accessible, and certified by the manufacturer as complying with U.S. Coast Guard requirements. They include:

- **Orange Distress Flag. (Day use only)**
  The distress flag is a day signal only. It must be at least 3 x 3 feet with a black square and ball on an orange background. It is most distinctive when attached and waved from a paddle or boat hook.

- **Electric Distress Light. (Night use only)**
  The electric distress light is accepted for night use only and must automatically flash the international SOS distress signal. Under Inland Navigation Rules, a high intensity white light flashing at regular intervals from 50-70 times per minute is considered a distress signal.

Fire Extinguishers

At least one fire extinguisher is required on all Pursuit boats. Boats 26' and larger may require two or three fire extinguishers. Coast Guard approved fire extinguishers are hand-portable, either B-I or B-II classification and have a specific marine type mounting bracket. It is recommended that the extinguishers be mounted in a readily accessible position.

Fire Extinguisher

Fire extinguishers require regular inspections to insure that:

- Seals & tamper indicators are not broken or missing.
- Pressure gauges or indicators read in the operable range.
- There is no obvious physical damage, corrosion, leakage or clogged nozzles.

Contact the U.S. Coast Guard Boating Safety Hotline, 1-800-368-5647, for information on the type and size fire extinguisher required for your boat.

Please refer to the information provided by the fire extinguisher manufacturer for instructions on the proper maintenance and use of your fire extinguisher.

INFORMATION FOR HALON OR AGENT 241 FIRE EXTINGUISHERS IS PROVIDED BY THE MANUFACTURER. IT IS ESSENTIAL THAT YOU READ THE INFORMATION CAREFULLY AND COMPLETELY UNDERSTAND THE SYSTEM, IN THEORY AND OPERATION, BEFORE USING YOUR BOAT.

Bilge and Fuel Fires

Fuel compartment and bilge fires are very dangerous because of the presence of gasoline in the various components of the fuel system and the possibility for explosion. You must make the decision to fight the fire or abandon the boat. If the fire can not be extinguished quickly or it is too intense to fight, abandoning the boat may be your only option. If you find yourself in this situation, make sure all passengers have a life preserver on and go over the side and swim well upwind of the boat. This will keep you and your passengers well clear of any burning fuel that could be released and spread on the water as the boat burns or in the event of an explosion. When clear of the danger, check about and account for all those who were aboard with you. Give whatever assistance you can to anyone in need or in the water without a buoyant device. Keep everyone together in a group for morale and to aid rescue operations.

GASOLINE CAN EXPLODE. IN THE EVENT OF A FUEL COMPARTMENT OR BILGE FIRE, YOU MUST MAKE THE DIFFICULT DECISION TO FIGHT THE FIRE OR ABANDON THE BOAT. YOU MUST CONSIDER YOUR SAFETY, THE SAFETY OF YOUR PASSENGERS, THE INTENSITY OF THE FIRE AND THE POSSIBILITY OF AN EXPLOSION IN YOUR DECISION.

Sound Signaling Devices:
The navigation rules require sound signals to be made under certain circumstances. Recreational vessels are also required to sound fog signals during periods of reduced visibility. Therefore, you must have some means of making an efficient sound signal that is audible for .5 nautical miles.

Navigation Lights:
Recreational boats are required to display navigation lights between sunset and sunrise and other periods of reduced visibility (fog, rain, haze, etc.) Navigation lights are intended to keep other vessels informed of your presence and course. Your Kodiak is equipped with the navigation lights required by the U.S. Coast Guard at the time of manufacture. It is up to you to make sure they are operational and turned on when required.

9.6 Carbon Monoxide Monitoring System

CARBON MONOXIDE IS A LETHAL, TOXIC GAS THAT IS COLORLESS AND ODORLESS. IT IS A DANGEROUS GAS THAT WILL CAUSE DEATH IN CERTAIN LEVELS.

The carbon monoxide (CO) monitor is installed in the cabin as standard equipment and warns the occupants of dangerous accumulations of carbon monoxide gas. If excess carbon monoxide fumes are detected, the monitor will sound an alarm indicating the presence of the toxic gas.

Should a very high level of carbon monoxide exist, the alarm will sound in a few minutes. However, if small quantities of CO are present or high levels are short-lived, the alarm will accumulate the information and determine when an alarm level has been reached. The carbon monoxide detector is automatically activated whenever the battery switch is in the "ON" position. The power light on the carbon monoxide detector should be lit to indicate that the carbon monoxide detector is activated.

Always make sure the battery switch is "ON" and the power light on the carbon monoxide detector is lit whenever the cabin is occupied.

A by-product of combustion, carbon monoxide (CO) is invisible, tasteless, odorless, and is produced by all engines, heating and cooking appliances. The most common sources of CO on boats are gasoline engines and auxiliary generators and propane or butane stoves. These produce large amounts of CO and should never be operated while sleeping.

A slight buildup of carbon monoxide over several hours causes headache, nausea and other symptoms that are similar to food poisoning, motion sickness or flu. High concentrations can be fatal within minutes. Many cases of carbon monoxide poisoning indicate that while victims are aware they are not well, they become so disoriented they are unable to save themselves by either exiting the area or calling for help. Also, young children, elderly persons, and pets may be the first affected.

Drug or alcohol use increases the effect of CO exposure. Individuals with cardiac or respiratory conditions are very susceptible to the dangers of carbon monoxide. CO poisoning is especially dangerous during sleep when victims are unaware of any side effects. The following are symptoms which may signal exposure to CO: (1) Headache (2) Tightness of chest or hyperventilation (3) Flushed face (4) Nausea (5) Drowsiness (6) Fatigue or Weakness (7) Inattention or confusion (8) Lack of normal coordination.

Persons who have been exposed to carbon monoxide should be moved into fresh air immediately. Have the victim breath deeply and seek immediate medical attention. To learn more about CO poisoning, contact your local health authorities.

Low levels of carbon monoxide over an extended period of time can be just as lethal as high doses over a short period. Therefore, low levels of carbon monoxide can cause the alarm to sound before the occupants of the boat notice any symptoms of carbon monoxide poisoning. CO monitors are very reliable and rarely sound false alarms. If the alarm sounds, always assume the hazard is real and move persons who have been exposed to carbon monoxide into fresh air immediately. Never disable the CO monitor because you think the alarm may be false. Always contact the monitor manufacturer or your local fire department for assistance in finding and correcting the situation.

Remember, carbon monoxide detectors do not guarantee that CO poisoning will not occur. Do not use the CO detector as a replacement for ordinary precautions or periodic inspections of equipment. Never rely on alarm systems to save your life, common sense is still prudent and necessary.

Please read the owner's manual supplied by the CO detector manufacturer and included with this manual, for operation instructions and additional information regarding the hazards of carbon monoxide gas. Refer to the Ventilation chapter for information on ventilating your boat properly while underway and other precautions while at anchor or in a slip. This is especially essential if your boat is equipped with a generator. The book entitled "Sportfish, Cruisers, Yachts - Owner's Manual," included with this manual, also has additional information and cautions regarding carbon monoxide poisoning.

Many manufacturers of carbon monoxide detectors offer a testing and recertification program. We recommend that you contact the manufacturer of your carbon monoxide detector and have it tested and recertified periodically.

ACTUATION OF THE CARBON MONOXIDE MONITOR INDICATES THE PRESENCE OF CARBON MONOXIDE (CO) WHICH CAN BE FATAL. EVACUATE THE CABIN IMMEDIATELY. DO A HEAD COUNT TO CHECK THAT ALL PERSONS ARE ACCOUNTED FOR. DO NOT REENTER THE CABIN UNTIL IT HAS BEEN AIRED OUT AND THE PROBLEM FOUND AND CORRECTED.

9.7 First Aid

It is the operator's responsibility to be familiar with the proper first-aid procedures and be able to care for minor injuries or illnesses of your passengers. In an emergency, you could be far from professional medical assistance. We strongly recommend that you be prepared by receiving training in basic first aid and CPR. This can be done through classes given by the Red Cross or your local hospital.

Your boat should also be equipped with at least a simple marine first-aid kit and a first-aid manual. The marine first-aid kit should be designed for the marine environment and be well supplied. It should be accessible and each person on board should be aware of its location. As supplies are used, replace them promptly. Some common drugs and antiseptics may lose their strength or become unstable as they age. Ask a medical professional about the supplies you should carry and the safe shelf life of prescription drugs or other medical supplies that may be in your first-aid kit. Replace questionably old supplies whether they have been used or not.

In many emergency situations, the Coast Guard can provide assistance in obtaining medical advice for treatment of serious injuries or illness. If you are within VHF range of a Coast Guard Station, make the initial contact on channel 16 and follow their instructions.

9.8 Additional Safety Equipment

Besides meeting the legal requirements, prudent boaters carry additional safety equipment. This is particularly important if you operate your boat offshore. You should consider the following items, depending on how you use your boat.

Satellite EPIRBS

EPIRBs (Emergency Position Indicating Radio Beacon) operate as part of a worldwide distress system. When activated, EPIRBs will send distress code homing beacons that allow Coast Guard aircraft to identify and find them quickly. The satellites that receive and relay EPIRB signals are operated by the National Atmospheric and Oceanic Administration (NOAA) in the United States. The EPIRB should be mounted and registered according to the instructions provided with the beacon, so that the beacon's unique distress code can be used to quickly identify the boat and owner.

Additional Equipment to Consider:

VHF Radio	Life Raft	Spare Anchor
Heaving Line	Fenders	First Aid Kit
Flashlight	Mirror	Searchlight
Sunburn Lotion	Tool Kit	Ring Buoy
Whistle or Horn	Anchor	Chart and Compass
Boat Hook	Spare Propeller	Mooring Lines
Food & Water	Binoculars	Sunglasses
Marine Hardware	Extra Clothing	Spare Parts

9.9 Maximum Capacity Rating

Your Kodiak is equipped with a "Maximum Capacities" plate, which is permanently attached to the cockpit near the helm. The plate indicates the maximum horsepower and load capacity for your boat. Never exceed the limits dictated by the information provided on the capacity plate.

IT IS EXTREMELY DANGEROUS TO OVERLOAD OR OVERPOWER YOUR BOAT. BOATS THAT ARE OVERLOADED OR OVERPOWERED CAN BECOME UNSTABLE OR DIFFICULT TO CONTROL. ALWAYS MAKE SURE THAT YOUR BOAT IS LOADED AND POWERED WITHIN THE LIMITS SHOWN ON YOUR BOAT'S CAPACITY PLATE.

Chapter 10:
OPERATION

10.1 General

Before you start the engines on your Kodiak, you should have become familiar with the various component systems and their operation, and have performed a "Pre-Cruise System Check." A thorough understanding of the component systems and their operation is essential to the proper operation of the boat. This manual and the associated manufacturers' information is provided to enhance your knowledge of your Pursuit boat. Please read them carefully. Also read the book titled "Sportfish, Cruisers and Yachts," included in your literature packet.

Your boat must have the necessary safety equipment on board and be in compliance with the U.S. Coast Guard, local and state safety regulations. There should be one Personal Floatation Device (PFD) for each person. Non-swimmers and small children should wear PFDs at all times. You should know and understand the "Rules of the Road" and have had an experienced operator brief you on the general operation of your new boat. At least one other person should be instructed on the proper operation of the boat in case the operator is suddenly incapacitated.

The operator is responsible for his safety and the safety of his passengers. When boarding or loading the boat, always step onto the boat, never jump. All passengers should be properly seated whenever the boat is operated above idle speed. Your passengers should not be allowed to sit on the seat backs, gunnels, bows, transoms or on fishing seats whenever the boat is underway. The passengers should also be seated to properly balance the load and must not obstruct the operator's view, particularly to the front.

Overloading and improper distribution of weight can cause the boat to become unstable and are significant causes of accidents. Know the weight capacity and horsepower rating of your boat. Do not overload or overpower your boat. Please refer to the Safety Equipment chapter for more information on the maximum capacity rating for your boat. **Remember, the information stated on the capacity plate does not relieve the operator from the responsibility of using good common sense and sound judgement in loading and operating the boat.**

10.2 Rules of the Road

As in driving an automobile, there are a few rules you must know for safe boating operation. The following information describes the basic navigation rules and action to be taken by vessels in a crossing, meeting or overtaking situation while operating in inland waters. These are basic examples and not intended to teach all the rules of navigation. For further information consult the "Navigation Rules" or contact the Coast Guard, Coast Guard Auxiliary, Department of Natural

Resources, or your local boat club. These organizations sponsor courses in boat handling, including rules of the road. We strongly recommend such courses. Books on this subject are also available from your local library.

SAILBOATS NOT UNDER POWER, PADDLE BOATS, VESSELS UNABLE TO MANEUVER, VESSELS ENGAGED IN COMMERCIAL FISHING AND OTHER VESSELS WITHOUT POWER HAVE THE RIGHT OF WAY OVER MOTOR POWERED BOATS. YOU MUST STAY CLEAR OR PASS TO THE STERN OF THESE VESSELS. SAILBOATS UNDER POWER ARE CONSIDERED MOTOR BOATS.

Crossing Situations

When two motor boats are crossing, the boat on the right has the right of way. The boat with the right of way should maintain its course and speed. The other vessel should slow down and permit it to pass. The boats should sound the appropriate signals.

Meeting Head-On or Nearly-So Situations

When two motor boats are approaching each other head-on or nearly head-on, neither boat has the right of way. Both boats should reduce their speed and turn to the right so as to pass port side to port side, providing enough clearance for safe passage. The boats should sound the appropriate signals.

Overtaking Situations

When one motor boat is overtaking another motor boat, the boat that is being passed has the right of way. The overtaking boat must make the adjustments necessary to provide clearance for a safe passage of the other vessel. The boats should sound the appropriate signals.

The General Prudential Rule

In obeying the Rules of the Road, due regard must be given to all dangers of navigation and collision, and to any special circumstances, including the limitations of the vessels, which may justify a departure from the rules that is necessary to avoid immediate danger or a collision.

Navigation Aids

Aids to navigation are placed along coasts and navigable waters as guides to mark safe water and to assist mariners in determining their position in relation to land and hidden dangers. Each aid to navigation is used to provide specific information. You should be familiar with these and any other markers used in your boating area.

STORMS AND WAVE ACTION CAN CAUSE BUOYS TO MOVE. YOU SHOULD NOT RELY ON BUOYS ALONE TO DETERMINE YOUR POSITION.

10.3 Pre-Cruise System Check

Before Starting the Engine

- Check the weather forecast. Decide if the planned cruise can be made safely.
- Be sure all required documents are on board.
- Be sure all necessary safety equipment is on board and operative. This should include items like the running lights, spotlight, life saving devices, etc. Please refer to the Safety Equipment chapter for additional information.
- Make sure you have signal kits and flare guns aboard, and they are in good operating condition.
- Be sure you have sufficient water and other provisions for the planned cruise.
- Leave a written message listing details of your planned cruise with a close friend ashore (Float Plan). The float plan should include a description of your boat, where you intend to cruise, and a schedule of when you expect to arrive in the cruising area and when you expect to return. Keep the person informed of any changes in your plan to prevent false alarms. This information will tell authorities where to look and the type of boat to look for in the event you fail to arrive.
- Check the amount of fuel on board. Observe the "rule of thirds": one third of the fuel for the trip out, one third to return and one third in reserve. An additional 15% may be consumed in rough seas.
- Check the water separating fuel filters for water.
- Check the engine oil tank and other fluid levels.
- Set the battery selector switch as desired.
- Check the bilge water level. Look for other signs of potential problems. Monitor for the scent of fuel fumes.
- Test the automatic and manual bilge pump switches to make sure the system is working properly. The bilge pump automatic float switch can be tested by inserting a stiff wire or small rod through one of the slots in the float chamber of the pump and lifting the float switch until the pump turns on.

- Have a tool kit aboard. The kit should include the following basic tools:

Spark Plug Wrench	Hammer
Spark Plug Gap Gauge	Electrician's Tape
Screwdrivers	Lubricating Oil
Pliers	Jackknife
Adjustable Wrench	Vise grip Pliers
Needle Nose Pliers	Wire Crimping Tool
End Wrench Set	Wire Connector Set

THERE MUST BE AT LEAST ONE PERSONAL FLOTATION DEVICE ON BOARD FOR EVERY PERSON ON BOARD AND ONE THROW-OUT FLOTATION DEVICE. CHECK THE U.S. COAST GUARD STANDARDS FOR THE CORRECT TYPE OF DEVICE FOR YOUR BOAT.

- Have the following spare parts on board:

Extra Light Bulbs	Spark Plugs
Fuses and Circuit Breakers	Flashlight and Batteries
Drain Plugs	Engine Oil
Propeller	Fuel Filters
Propeller Nuts	Fuel Hose and Clamps

- Make sure all fire extinguishers are in position and in good operating condition.
- Be sure the shift control is in the neutral position.
- Be sure the emergency stop lanyard is attached to the operator and the stop switch.

VAPORIZING LIQUID EXTINGUISHERS GIVE OFF TOXIC FUMES; USE ONLY COAST GUARD APPROVED FIRE EXTINGUISHERS.

10.4 Operating Your Boat

After Starting the Engine

TO REDUCE THE RISK OF A FIRE OR EXPLOSION, DO NOT START THE ENGINE WHEN FUEL FUMES ARE PRESENT. FUEL FUMES ARE DANGEROUS AND HARMFUL TO YOUR HEALTH.

- Visibly check the engine to be sure there are no apparent water, fuel or oil leaks.
- Check the operation of the engine cooling system. (Refer to Chapter 1)
- Check the engine gauges. Make sure they are reading normally.
- Check the controls for proper operation.
- Make sure all lines, cables, anchors, etc. for securing a boat are on board and in good condition. All lines should be coiled, secured and off the decks when underway.
- Have a safe cruise and enjoy yourself.

Remember

When you operate a boat, you accept the responsibility for the boat, for the safety of passengers and for others out enjoying the water.

- Alcohol or drugs can severely reduce your reaction time and affect your better judgement.
- Alcohol severely reduces the ability to react to several different signals at once.
- Alcohol makes it difficult to correctly judge speed and distance, or track moving objects.
- Alcohol reduces night vision, and the ability to distinguish red from green.

YOU SHOULD NEVER OPERATE YOUR BOAT WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.

- Avoid sea conditions that are beyond the skill and experience of you and your crew.

MAKE SURE ONE OTHER PERSON ON THE BOAT IS INSTRUCTED IN THE OPERATION OF THE BOAT AND THAT THE BOAT IS OPERATED IN COMPLIANCE WITH ALL STATE AND LOCAL LAWS GOVERNING THE USE OF A BOAT.

DO NOT OPERATE THE BOAT UNLESS IT IS COMPLETELY ASSEMBLED. KEEP ALL FASTENERS TIGHT. KEEP ADJUSTMENTS ACCORDING TO SPECIFICATIONS.

- Before operating the boat for the first time, read the engine break-in procedures. The break-in procedures are found in the owner's manual for the engine. The manual is in the literature packet.

- As different types of engines are used to power the boat, have the dealer describe the operating procedures for your boat. For more instructions on "How To Operate The Boat," make sure you read the instructions given to you in the owner's manual for the engine you have selected.

Note: For more instructions on safety, equipment and boat handling, enroll in one of the several free boating courses offered. For information on the courses offered in your area, call the "Boating Course Hotline," 1-800-336-2628.

Note: If the drive unit hits an underwater object, stop the engine. Inspect the drive unit for damage. If the unit is damaged, contact your dealer for a complete inspection and repair of the unit.

To stop the boat, follow this procedure:

- Allow the engine to drop to the idle speed.
- Make sure the shifting lever is in the neutral position.

Note: If the engine has been run at high speed for a long period of time, allow the engine to cool down by running the engine in the idle position for 3 to 5 minutes.

- Turn the ignition key to the "OFF" position.
- Raise the trim tabs to the full "UP" position.

After Operation

- If operating in saltwater, wash the boat and all equipment with soap and freshwater.
- Check the bilge area for debris and excess water.
- Fill the fuel tank to near full to reduce condensation.
- Check that the boat is properly moored.
- Turn off all electrical equipment except the automatic bilge pumps.
- If you are going to leave the boat for a long period of time, put the battery main switch in the "OFF" position and close all sea cocks.
- Make sure the boat is securely moored.

TO PREVENT DAMAGE TO THE BOAT, CLOSE ALL SEACOCKS BEFORE LEAVING THE BOAT.

10.5 Grounding and Towing

If the boat should become disabled, or if another craft that is disabled requires assistance, great care must be taken. The stress applied to a boat during towing may become excessive. Excessive stress can damage the structure of the boat and create a safety hazard for those aboard.

Freeing a grounded vessel, or towing a boat that is disabled, requires specialized equipment and knowledge. Line failure and structural damage caused by improper towing have resulted in fatal injuries. Because of this, we strongly suggest that these activities be left to those who have the equipment and knowledge, e.g., the U.S. Coast Guard or a commercial towing company, to safely accomplish the towing task.

THE MOORING CLEATS ON PURSUIT BOATS ARE NOT DESIGNED OR INTENDED TO BE USED FOR TOWING PURPOSES. THESE CLEATS ARE SPECIFICALLY DESIGNED AS MOORING CLEATS FOR SECURING THE BOAT TO A DOCK, PIER, ETC. DO NOT USE THESE FITTINGS FOR TOWING OR ATTEMPTING TO FREE A GROUNDED VESSEL.

WHEN TOWING OPERATIONS ARE UNDERWAY, HAVE EVERYONE ABOARD BOTH VESSELS STAY CLEAR OF THE TOW LINE AND SURROUNDING AREA. A TOW LINE THAT SHOULD BREAK WHILE UNDER STRESS CAN BE VERY DANGEROUS.

RUNNING AGROUND OR STRIKING AN UNDERWATER OBSTRUCTION CAN RESULT IN SERIOUS INJURY TO PASSENGERS AND DAMAGE TO THE MOTOR OR BOAT. IF YOUR BOAT SHOULD BECOME GROUNDED, DISTRIBUTE PERSONAL FLOTATION DEVICES AND INSPECT THE BOAT FOR POSSIBLE DAMAGE. THOROUGHLY INSPECT THE BILGE AREA FOR SIGNS OF LEAKAGE. AN EXPERIENCED SERVICE FACILITY SHOULD CHECK YOUR UNDERWATER GEAR AT THE FIRST OPPORTUNITY. DO NOT CONTINUE TO USE YOUR BOAT IF THE CONDITION OF THE UNDERWATER EQUIPMENT IS QUESTIONABLE.

10.6 Water Skiing

Your Kodiak could be equipped for water skiing. If you have never driven skiers before, you should spend some hours as an observer and learning from an experienced driver. If you are an experienced driver, you should take some time to become familiar with the boat and the way it handles before pulling a skier. The driver also should know the skier's ability and drive accordingly. The following safety precautions should be observed while towing water skiers.

- Water ski only in safe areas, away from other boats and swimmers, out of channels, and in water free of underwater obstructions.

- Water ski only during daylight hours.

- Make sure that anyone who skis can swim. Do not allow people who cannot swim to water ski.

- Be sure that the skier is wearing a proper life jacket. A water skier is considered on board the boat and a Coast Guard approved life jacket is required. It is advisable and recommended for a skier to wear a flotation device designed to withstand the impact of hitting the water at high speed.

- Always carry a second person on board to observe the skier so that your full attention can be given to the safe operation of the boat.

- Approach a skier in the water from the downwind side and be certain to stop the motion of the boat and your motor before coming in close proximity to the skier. The skier should also be kept on the helm side of the boat so the operator can keep the skier in sight at all times.

- Give immediate attention to a fallen skier. A fallen skier is very hard to see by other boats and is extremely vulnerable. When a skier falls, be prepared to immediately turn the boat and return to the skier. Never leave a fallen skier alone in the water for any reason.

MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS, OR OTHER SEVERE INJURY. DO NOT USE THE SWIM PLATFORM OR SWIM LADDER WHILE THE ENGINE IS RUNNING. STOP THE ENGINE IF DIVERS, SWIMMERS OR SKIERS ARE ATTEMPTING TO BOARD. ALWAYS REMOVE AND PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINE.

10.7 Fishing

Fishing can be very exciting and distracting for the operator when the action gets intense. You must always be conscious of the fact that your primary responsibility is the safe operation of your boat and the safety of your passengers and other boats in the area.

You must always make sure the helm is properly manned and is never left unattended while trolling.

If you are fishing in an area that is crowded with other fishing boats, it may be difficult to follow the rules of the road. This situation can become especially difficult when most boats are trolling. Being courteous and exercising good common sense is essential. Avoid trying to assert your right of way and concentrate on staying clear and preventing tangled or cut lines and other unpleasant encounters with other boats. Also keep in mind that fishing line wrapped around your propeller shaft can damage the seals in the outboard lower unit.

10.8 Trailering Your Boat

If you trailer your boat, make sure that your tow vehicle is capable of towing the weight of the trailer, boat and equipment and the weight of the passengers and equipment inside the vehicle. This may require that the tow vehicle be specially equipped with a larger engine, transmission, brakes and trailer tow package.

The boat trailer is an important part of your boating package. The trailer should be matched to your boat's weight and hull. Using a trailer with a capacity too low will be unsafe on the road and cause abnormal wear. A trailer with a capacity too high, can damage the boat. Contact your dealer to evaluate your towing vehicle and hitch, and to make sure you have the correct trailer for your boat.

Important Note:
Your Kodiak is a heavy boat and care must be taken when selecting the trailer. We recommend that you use a bunk style trailer that incorporates a combination of heavy duty rollers, to support the keel and long bunks running under and parallel to the stringers to support the hull. Avoid using a full roller trailer that does not have bunks. Roller trailers have a tendency to put extreme pressure points on the hull, especially on the lifting strakes, and have damaged boats. The situation is worse during launching and haul out. <u>Damage resulting from improper trailer support or the use of a full roller trailer will not be covered by the Kodiak Warranty.</u>

Note: Contact your dealer to evaluate your towing vehicle and hitch, and to make sure you have the correct trailer for your boat.

Choosing and setting up a trailer:

- Make sure the trailer is a match for your boat's weight and hull design. More damage can be done to a boat by the stresses of road travel than by normal water operation. A boat hull is designed to be supported evenly by water. So, when it is transported on a trailer it should be supported structurally as evenly across the hull as possible allowing for even distribution of the weight of the hull, engine and equipment.

- Make sure the trailer bunks and rollers properly support the hull and do not put pressure on the lifting strakes. The rollers and bunks must be kept in good condition to prevent scratching and gouging of the hull.

- The capacity rating of the trailer should be greater than the combined weight of the boat, motor, and equipment. The gross vehicle weight rating must be shown on the trailer. Make sure the weight of the boat, engine, gear and trailer is not more than the gross vehicle weight rating.

- Make sure the boat is securely fastened on the trailer to prevent movement between the boat and trailer. The bow eye on the boat should be secured with a rope, chain or turnbuckle in addition to the winch cable. Additional straps may be required across the beam of the boat.

Note: Your dealer will give instructions on how to load, fasten and launch your boat.

BOATS HAVE BEEN DAMAGED BY TRAILERS THAT DO NOT PROPERLY SUPPORT THE HULL. ALWAYS MAKE SURE THE TRAILER BUNKS AND ROLLERS ARE ADJUSTED SO THEY ARE NOT PUTTING EXCESSIVE PRESSURE ON THE LIFTING STRAKES AND ARE PROVIDING ENOUGH SUPPORT FOR THE HULL. HULL DAMAGE RESULTING FROM IMPROPER TRAILER SUPPORT IS NOT COVERED BY THE PURSUIT WARRANTY.

Before Going Out On The Highway:

- The BIMINI TOP, SIDE CURTAINS, CLEAR CONNECTOR, BACK DROP and AFT CURTAIN must be removed when trailering. Canvas enclosures are not designed to withstand the extreme wind pressure encountered while trailering and will be damaged. Always remove and properly store the enclosure before trailering your boat.

- Make sure the tow BALL and COUPLER are the same size and bolts nuts are tightly secured.

- The COUPLER MUST BE COMPLETELY OVER THE BALL and the LATCHING MECHANISM LOCKED DOWN.

- Make sure the TRAILER IS LOADED EVENLY from front to rear as well as side to side and has the correct weight on the hitch. Too much weight on the hitch will cause the rear of the tow vehicle to drag and may make steering more difficult. Too little weight on the hitch will cause the rig to fishtail and will make controlling the tow vehicle difficult. Contact your dealer or the trailer manufacturer for the correct weight on the hitch for your trailer.

- The SAFETY CHAINS must be attached crisscrossing under the coupler to the frame of the tow vehicle. If the ball was to break, the trailer would follow in a straight line and prevent the coupler from dragging on the road. Make sure the trailer emergency brake cable or chain also is installed to the tow vehicle frame.

- Make sure the LIGHTS on the trailer function properly.

- CHECK THE BRAKES. On a level parking area roll forward and apply the brakes several times at increasing speeds to determine if the brakes on the tow vehicle and trailer are working properly.

- Make sure the tow vehicle has SIDE VIEW MIRRORS that are large enough to provide an unobstructed rear view on both sides of the vehicle.

- CHECK THE TIRES and WHEEL BEARINGS.

MAKE SURE YOUR TOWING VEHICLE AND TRAILER ARE IN COMPLIANCE WITH ALL STATE AND LOCAL LAWS. CONTACT YOUR STATE MOTOR VEHICLE BUREAU FOR LAWS GOVERNING THE TOWING OF TRAILERS.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Chapter 11:
EXTERIOR EQUIPMENT

11.1 Deck

Rails and Deck Hardware

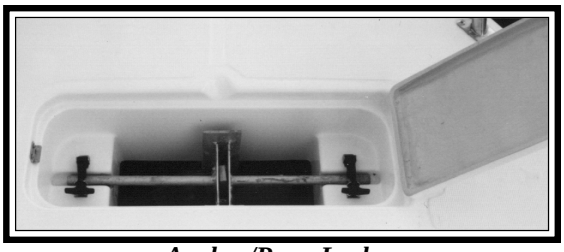
The rail system and hardware fittings have been selected and installed to perform specific functions. Fenders or mooring lines should be secured to the cleats and not to rails or stanchions. Be sure a clear lead exists when running dock lines or anchor lines. A line inadvertently run around a stanchion or over the rail could cause damage.

IMPORTANT: All fittings must be periodically inspected for loose fit, wear and damage. Any problems should be corrected immediately.

PURSUIT BOATS ARE NOT EQUIPPED WITH HARDWARE DESIGNED FOR TOWING PURPOSES. THE MOORING CLEATS ARE NOT TO BE USED FOR TOWING ANOTHER VESSEL OR HAVING THIS BOAT TOWED.

Anchor/Rope Locker

The anchor locker is in the bow of the boat and accessed through a hatch in the deck. The anchor line is always stored in the locker. The anchor can be stored in the anchor locker. If the anchor is stored in the anchor locker it must be properly secured to prevent it from bouncing in the locker and causing damage to the hull or anchor locker.



Anchor/Rope Locker

The anchor locker is drained into the bilge by a drain in the floor of the locker. It is very important to check the drain frequently to make sure it is clean and free flowing.

THE ANCHOR MUST BE POSITIONED SO IT DOES NOT REST AGAINST THE HULL SIDES AND BE PROPERLY SECURED AT ALL TIMES WHEN IT IS STORED IN THE ANCHOR/ROPE LOCKER. A LOOSE ANCHOR IN THE ANCHOR LOCKER WILL BOUNCE AND CAN DAMAGE THE BOAT. DAMAGE RESULTING FROM THE ANCHOR BOUNCING IN THE ANCHOR LOCKER IS NOT COVERED BY THE KODIAK WARRANTY.

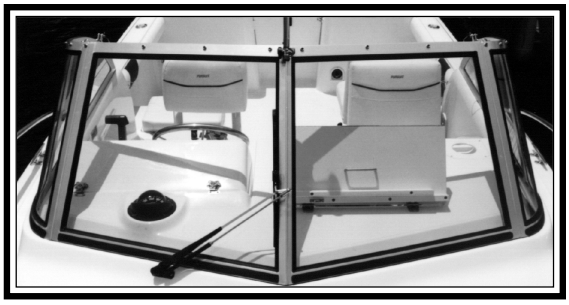
Deck Hatch

The deck hatch is supported in the open position by adjustable hatch adjusters. To close the hatch, release the cams on the hatch adjusters and lower the hatch. Secure in the closed position with the two cam levers on the inside of the hatch.

Deck Hatch

Windshield

The windshield is equipped with an opening vent panel on each side of the windshield. To open the vent, release the locking T-handle and open the vent to the desired position. Lock the vent in place by turning the T-handle 1/4 turn. The friction of the T-handle in the guide will hold the vent in that position.



Windshield

The front and side wing panels are tempered safety glass. The curved glass panels on the port and starboard side of the windshield are made of tinted acrylic plastic glass. Acrylic glass scratches easily. Never use a dry cloth or glass cleaning solutions on acrylic. Use a soft cloth and mild soap and water for routine cleaning. Solvents and products containing ammonia can permanently damage acrylic. Please refer to the Routine Maintenance chapter for more information on the proper care and maintenance of acrylic plastic glass.

Bimini Top and Side Curtains

The canvas for Pursuit boats is custom fit to each boat. The bimini top is designed with a relatively flat profile and a snug fit. The canvas is fit to the boat at the factory and the bimini top must be installed properly in order for the clear connector and side curtains to fit.

To install the Bimini top, attach the main legs to the deck hinges using the quick release pins and leave the rear stanchions loose. Next, open the bimini and attach the front straps to the metal eye straps on the top of the windshield frame. Attach the rear stanchions, one at a time, to the rear deck hinges located near the rear of the windshield. Use your body weight on the rear corner of the bimini to pull down and stretch the fabric until the stanchion eye end lines up with the hole in the deck hinge. Secure each eye end to the deck hinge with the quick release pins. If the top is still adjusted to factory specifications, the top will be level and the main legs will have a visible bow in them.

Note: The front straps of the bimini must be secured to the windshield before the rear stanchions are secured to the deck. If the rear stanchions are secured first, it will be very difficult to secure the front straps without loosening them. If the front straps are loosened, the bimini top will be too loose and the clear connector and side curtains will not fit properly and appear to be too short.

Attach the clear connector to the zipper at the front of the top and snap it to the top of the windshield frame beginning with the center snaps. If the bimini top is adjusted properly, the clear connector will have to be stretched just enough to pull out the wrinkles and reach the snaps on the windshield. The front straps will continue to bear the main load of the top.

Once the clear connector is completely installed, the side curtains can be put on. Attach the side curtains to the zippers on the bimini and to the front connector. Snap the curtains to the windshield and the deck beginning with the forward snaps on the windshield. If the bimini is adjusted properly, the side curtains will have to be stretched slightly to pull out the wrinkles and reach the snaps. The main load for the top should remain on the front straps and the rear stanchions. Attach the drop curtain to the zipper on the back of the bimini and to the side curtains. Snap the curtain to the deck and cockpit.

If you have an aft curtain, it is installed by attaching it to the zipper on the back of the bimini and to the side curtains. Then snap the curtain to the deck beginning with the front snaps and work towards the stern.

Note: Cold weather can make the clear vinyl material stiff and difficult to stretch to the snaps. This can particularly difficult with new canvas that has been stored off the boat. Laying the curtains in the sun for 30 minutes during the heat of the day will make installing them much easier in cold whether.

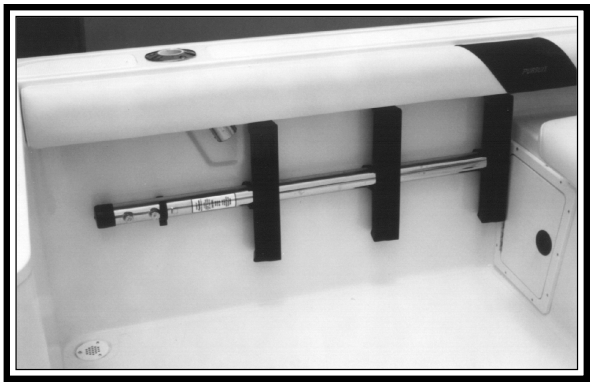
11.2 Hull

Swim Platform

Your boat is equipped with an integral swim platform and engine mounting system located in the stern of the boat. There is an inspection deck plate in the transom engine well to provide access to the stern bilge and engine mounting bolts. Always make sure the plate is secure before operating your boat.

Boarding Ladder (Optional)

The optional boarding ladder is mounted to the side of the cockpit, underneath the gunwale, when it is in the stored position. To use the ladder, remove it from the storage clips and slide the studs into the special bracket on the port side of the transom. The ladder floats and must be secured in the boarding position by turning the cam lock on the ladder so it catches the bottom of the transom ladder bracket. The ladder must be removed from the transom bracket and properly secured to the storage clips before starting the engine.



Boarding Ladder

MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS, OR OTHER SEVERE INJURY. DO NOT USE THE SWIM PLATFORM OR SWIM LADDER WHILE THE ENGINE IS RUNNING. STOP THE ENGINE IF DIVERS OR SWIMMERS ARE ATTEMPTING TO BOARD. ALWAYS REMOVE AND PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINE.

Trim Tabs (Optional)

The optional trim tabs are mounted to the hull on the transom below the water line. The trim tabs are an important part of the control systems. Please refer to chapter 2 for information on the trim tabs.

11.3 Cockpit

IN CERTAIN CONDITIONS, OPEN EXTERIOR DOORS AND HATCHES THAT ARE NOT SECURED PROPERLY CAN SLAM CLOSED UNEXPECTEDLY AND CAUSE INJURY TO PASSENGERS OR DAMAGE TO THE BOAT. MOST DOORS AND HATCHES ARE EQUIPPED WITH SPECIAL FASTENERS, HATCH LIFTERS, OR SNAPS AND/OR STRAPS, TO SECURE THEM IN THE OPEN POSITION. ALWAYS MAKE SURE THAT THESE HATCHES AND DOORS ARE PROPERLY SECURED WHENEVER THEY ARE IN THE OPEN POSITION.

Helm

The helm and engine controls are located on an opening helm station. The helm station is hinged at the bottom and opens to provide access to service the helm equipment or to install electronics.

To open the helm station, release the clamps at the top of the helm. A strap holds the helm in the open position and prevents it from opening too far. Always make sure the helm station clamps are properly secured when the helm is closed.

Helm

ALWAYS MAKE SURE THE HELM STATION CLAMPS ARE PROPERLY SECURED BEFORE OPERATING OR TRAILERING YOUR BOAT. IF THE HELM STATION IS NOT PROPERLY SECURED, IT COULD OPEN UNEXPECTEDLY AND DAMAGE THE BOAT OR CAUSE LOSS OF CONTROL.

UNDER NO CIRCUMSTANCES SHOULD THE HELM BE OPENED WHEN THE ENGINE(S) ARE RUNNING. IN SOME SITUATIONS IT IS POSSIBLE TO ACCIDENTALLY ENGAGE THE ENGINE SHIFT AND THROTTLE CONTROL INTO GEAR AS THE HELM IS OPENING. THIS COULD RESULT IN LOSS OF CONTROL, DAMAGE TO THE BOAT, AND INJURY TO PASSENGERS.

Companion / Lounge Seat

The companion seat is an adjustable back-to-back seat or a lounge. To convert the seats to a lounge, loosen the friction knobs on slide track assembly, release the center spring lock, and pull the front and rear seat bases out. To convert the lounge to back-to-back seats, lift the center cushions slightly, then push the seat bases toward the center of the lounge until the seat backs are in the upright position. The spring lock will automatically lock when the rear seat is in the full up position. Secure the seats with the slide track friction knobs.

Companion Seat

When the seat is in the upright position and the spring lock is latched, the seat can be adjusted fore and aft by loosening the friction knobs and sliding the seat to the desired position. Always secure the seat with the friction knobs before operating the boat.

Note: Seat slide damage may occur if the seat is used as a step when it is in the lounge position.

Helm Seat

The helm seat is a pedestal seat that swivels and adjusts fore and aft. There are two levers and one tension knob on the seat base. Lifting the lever located at the front of the seat base allows the seat to be adjusted fore and aft. Releasing the lever locks the seat in that position. Lifting the lever on the port side of the seat base releases the pivot lock and allows the helm seat to be swiveled on the pedestal. The helm seat will automatically lock when it is swiveled back to the operating position. The friction knob adjusts the tension of seat base on the pedestal and is also located on the port side of the seat. It should be adjusted to allow the seat to be swiveled when the swivel lock is released and tight enough to eliminate play between the seat base and the pedestal.

Cockpit Storage

The helm seat is mounted on a cooler / livewell compartment. The cooler can be converted to a livewell if this option is installed. The cooler / livewell is insulated and drains overboard. The companion seat is mounted on a storage compartment that includes a tackle locker with removable drawers, a storage compartment, and water ski / rod storage.

Stern Coolers / Fishboxes

Two insulated coolers are located at the rear of the cockpit. They are drained overboard by gravity. They should be drained and cleaned after each use.

Transom Door

A transom door is incorporated in-between the stern coolers. The transom door should only be opened when the boat is not in motion. The door must be latched in the "CLOSED" position before operating the boat. Never leave the transom door unlatched.

Coolers and Transom Door

Note: Periodically inspect the transom door fittings for wear, damage, or loose fit. Any problems should be inspected and corrected immediately.

NEVER OPEN THE TRANSOM DOOR WHILE UNDERWAY OR IN ROUGH SEA CONDITIONS. IN CERTAIN SITUATIONS, AN OPEN TRANSOM DOOR COULD ALLOW A SUBSTANTIAL AMOUNT OF WATER TO ENTER THE COCKPIT CREATING A POTENTIALLY DANGEROUS CONDITION. THE TRANSOM DOOR SHOULD BE CLOSED AND PROPERLY LATCHED WHENEVER THE ENGINE IS RUNNING.

OPERATING THE BOAT UNDER POWER WITH THE TRANSOM DOOR OPEN MAY ALLOW PERSONS TO FALL OVERBOARD AND INTO BOAT PROPELLERS OR TO BE LOST IN OPEN WATER. ALWAYS CHECK TO MAKE SURE THE TRANSOM DOOR IS PROPERLY CLOSED AND LATCHED BEFORE STARTING THE ENGINES AND NEVER OPERATE THE BOAT UNDER POWER WITH THE TRANSOM DOOR OPEN.

Stern Jump Seats

Your boat is equipped with stern jump seats. The seats are designed with a telescoping support leg that allows the seats to fold against the rear of the cockpit when they are not in use.

To use the seats, raise the seat base and extend the leg to the open position. Secure the leg with the quick release pins, then guide the bottom of the leg into the radius of the cockpit sole and the rear vertical surface of the cockpit. The leg should be at approximately 45° to the seat base when it is in the proper support position.

To fold the seats to the stored position, raise the seat and remove the quick release pins on the leg. Shorten the leg to the stored position and secure with the pins. The seat can now be folded against the rear of the cockpit. Secure the seats to the rear of the cockpit with the straps that snap to the seats. The straps prevent the seats from damaging the gelcoat in rough seas or when trailering while they are in the stored position.

The jump seats can be removed from the cockpit by removing the quick release pins on the hinges at the rear of each seat.

Chapter 12:
INTERIOR EQUIPMENT

12.1 Portable Head

The portable head is provided as optional equipment. The system is made up of two major components, an upper tank and a lower tank. The upper tank contains the fresh water supply, a bellows pump, a seat and the lid. The bottom tank contains the flush valve, a waste holding tank, a chemical storage compartment and the drain nozzle. The components are secured together by a clamping mechanism when the portable head is ready for use.

Portable Head

In some areas the law requires that portable heads be equipped with an optional permanent deck mounted pump out system to evacuate the waste with a dock side pump. Boats with the optional portable head pump out will be equipped with a deck fitting marked "waste" located on the deck. Since this system is required to be permanent, the bottom waste tank cannot be removed and the only way to evacuate the system is by a dock side pump.

To use the portable head, add the recommended amount of holding tank deodorant to the waste tank and fill the freshwater tank. To flush after use, pull the waste valve handle straight out, and then press flushing bellows one or more times to rinse. To close and seal the waste holding tank, simply push the valve handle all the way in. Monitor the level in the waste tank and empty as necessary.

TOILET TISSUE, PAPER TOWELS OR SANITARY NAPKINS CAN DAMAGE THE HEAD. DO NOT PLACE SUCH MATERIAL IN THE PORTABLE HEAD.

Maintenance

To keep your portable head operating properly it must be emptied and properly cleaned periodically. Please refer to the manufacturer owner's manual for detailed instructions on the proper operation of your portable head.

IN SOME AREAS THE LAW REQUIRES A WASTE PUMP OUT SYSTEM ON PORTABLE HEADS. IF YOUR BOAT IS EQUIPPED WITH THE WASTE PUMP OUT, MAKE SURE YOU KNOW THE LAWS FOR THE AREAS IN WHICH YOU BOAT BEFORE MODIFYING OR REMOVING THE PUMP OUT SYSTEM.

THE PORTABLE HEAD MUST BE PROPERLY WINTERIZED BEFORE WINTER LAY-UP OR FOR COLD WEATHER USE. PLEASE REFER TO THE MANUFACTURER OWNER'S MANUAL FOR COLD WEATHER AND WINTERIZING INSTRUCTIONS.

12.2 Cabin and V-Berth

The cabin of the 22 Kodiak is accessed through a companionway hatch and door. The door hatch is equipped with gas hatch lifters that will automatically hold the hatch in the full open or closed position. The cabin door has a special latch that can be locked when the door is closed. Another latch secures the door in the open position. Make sure the cabin door is properly secured in the closed or open position before operating the boat.

The v-berth in the cabin of the Kodiak is equipped with removable cushions and storage below the center v-berth cushion. Additional storage is available by ordering the optional sea bags that attach to the cabin sides above the v-berth. The access door to the battery compartment and the cabin sole drain are located at the rear of the cabin below the companionway door. An extension boot for the waterski/rod storage compartment is mounted to the port side of the cabin bulkhead. When this boot is unsnapped it extends the length of the storage compartment to accommodate long skis or fishing rods.

12.3 Carbon Monoxide Detector

A carbon monoxide (CO) monitor is installed in the cabin on the rear bulkhead. If excess carbon monoxide fumes are detected, an audible beeping will sound indicating the presence of the toxic gas.

A by product of combustion, carbon monoxide is invisible, tasteless, odorless, and is produced by all engines, heating and cooking appliances. The most common sources of CO on boats are gasoline engines and auxiliary generators and propane or butane stoves. These produce large amounts of CO and should never be operated while sleeping.

Please read the owner's manual supplied by the detector manufacturer for operation instructions and additional information regarding the hazards of carbon monoxide gas. Also read more about carbon monoxide, carbon monoxide detectors, and proper ventilation in the Ventilation Systems and Safety Equipment chapters in this manual. If you did not receive a manual for your carbon monoxide detector, please contact the Pursuit Customer Relations Department.

ACTUATION OF THE CARBON MONOXIDE DETECTOR INDICATES THE PRESENCE OF CARBON MONOXIDE (CO) WHICH CAN BE FATAL. EVACUATE THE CABIN IMMEDIATELY. DO A HEAD COUNT TO CHECK THAT ALL PERSONS ARE ACCOUNTED FOR. DO NOT REENTER THE CABIN UNTIL IT HAS BEEN AIRED OUT AND THE PROBLEM FOUND AND CORRECTED.

CO POISONING PRODUCES FLUE-LIKE SYMPTOMS: WATERY AND ITCHY EYES, HEADACHES, AND FATIGUE. YOU CAN'T SEE IT AND YOU CAN'T SMELL IT. IT'S AN INVISIBLE KILLER.

CO DETECTORS ARE VERY RELIABLE AND RARELY SOUND FALSE ALARMS. IF THE ALARM SOUNDS, ALWAYS ASSUME THE HAZARD IS REAL AND MOVE PERSONS WHO HAVE BEEN EXPOSED TO CARBON MONOXIDE INTO FRESH AIR IMMEDIATELY. NEVER DISABLE THE CO DETECTOR BECAUSE YOU THINK THE ALARM MAY BE FALSE. ALWAYS CONTACT THE MONITOR MANUFACTURER, THE PURSUIT CUSTOMER RELATIONS DEPARTMENT OR YOUR LOCAL FIRE DEPARTMENT FOR ASSISTANCE IN FINDING AND CORRECTING THE SITUATION.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Chapter 13:
ROUTINE MAINTENANCE

13.1 Exterior Hull and Deck

Hull Cleaning-Below The Water Line

When the boat is removed from the water, clean the outer bottom surface immediately. Algae, grass, dirt and other marine growth is easier to remove while the hull is still wet. Use a pressure cleaner or a hard bristle brush to clean the surface.

If the hull bottom has been painted with antifouling paint, contact your dealer for the recommended maintenance procedures.

Bottom Painting

If the boat is to be left in saltwater for extended periods, the hull must be protected from marine growth by antifouling paint. Because of variations in water temperature, marine growth, and pollution in different regions, your dealer and/or a qualified boat yard in your area should be consulted when deciding what bottom paint system to apply to your hull. This is extremely important as pollution and marine growth can damage fiberglass hulls.

SANDING OR SANDBLASTING THE HULL BOTTOM WILL DAMAGE THE FIBERGLASS. USE ONLY STANDARD ANTIFOULING PAINTS AND FIBERGLASS WAX REMOVERS AND PRIMERS RECOMMENDED BY THE ANTIFOULING PAINT MANUFACTURER WHEN PREPARING THE HULL FOR BOTTOM PAINT. SANDING OR SANDBLASTING AND THE USE OF A COATING OTHER THAN STANDARD ANTIFOULING PAINT OR EPOXY BARRIER COATINGS ARE NOT RECOMMENDED AND WILL VOID THE FIVE YEAR HULL BLISTER WARRANTY.

Do not allow the hull antifouling paint to contact the outboard motor. Most antifouling paints designed for hull bottoms contain copper and can cause severe galvanic damage to the motor. Always leave a 1/2" barrier between the hull bottom paint and outboard motor.

Most bottom paints require some maintenance. Proper maintenance is especially important when the boat is in saltwater and not used for extended periods or after dry storage. If the hull bottom has been painted with antifouling paint, contact your dealer for the recommended maintenance procedures.

Sacrificaial Anodes

Sacrificial anodes are installed on the outboard motor and should be installed on the trim tabs if the boat is to be left in the water. Contact your dealer for the proper size and type of anodes to be used and the specific installation procedure. Anodes should be checked monthly and changed when they are 75% of their original size. When replacing the anodes, make sure the contact surfaces are clean, shinny metal and free of paint and corrosion. Never paint over the anode.

Boats stored in salt water will normally need to have the anodes replaced every 6 months to one year. Anodes requiring replacement more frequently may indicate a stray current problem within the boat or at the slip or marina. Anodes that do not need to be replaced after one year may not be providing the proper protection. Loose or low quality anodes could be the problem. Contact your dealer for the proper size and type of anodes to be used and the specific installation procedure.

Fiberglass Gelcoat Surfaces

Normal maintenance requires only washing with mild soap and water. A stiff brush can be used on the nonskid areas. Kerosene or commercially prepared products will remove oil and tar which could be a problem on trailered boats. Harsh abrasive and chemical cleaners are not recommended because they can damage or dull the gelcoat, reducing its life and making it more susceptible to stains. When the boat is used in saltwater, it should be washed thoroughly with soap and water after each use.

At least once a season, wash and wax all exposed fiberglass surfaces. Use a high quality automotive or boat wax. Follow the procedure recommended by the wax manufacturer. The washing and waxing of your boat will have the same beneficial effects as they have on an automobile finish. The wax will fill minute scratches and pores thus helping to prevent soiling and will extend the life of the gelcoat.

After the boat is exposed to the direct sunlight for a period of time, the color in the gelcoat tends to fade, dull or chalk. A heavier buffing is required to bring the gelcoat back to its original luster. For power cleaning, use a light cleaner such as Mirror Glaze #1. To clean the boat by hand, use a heavier automotive cleaner. Before cleaning the surfaces, read the instructions given with the cleaner. After cleaning the surfaces, apply wax, and polish all fiberglass surfaces except the nonskid areas.

If the fiberglass should become damaged and need repair, contact your dealer for an authorized repair person to do the work.

DO NOT WAX NONSKID AREAS AS THIS COULD MAKE THEM SLIPPERY AND CONSEQUENTLY INCREASE THE POSSIBILITY OF INJURY.

Stainless Steel Hardware

When using the boat in saltwater, the hardware should be washed with soap and water after each use. When your boat is used in a corrosive environment such as saltwater, water with a high sulfur content, or polluted water, the stainless steel will periodically develop surface rust stains. This is perfectly normal under these conditions. The stainless can normally be cleaned and protected by using a high quality boat or automotive wax or a commercial metal cleaner and protectant.

UNDER NO CIRCUMSTANCES SHOULD ANY ABRASIVE MATERIALS SUCH AS SANDPAPER, BRONZE WOOL, OR STEEL WOOL BE USED ON STAINLESS STEEL. DAMAGE TO THE HARDWARE WILL RESULT.

Anodized Aluminum Surfaces

Anodized aluminum should be washed periodically with soap and water to keep it clean. If the boat is used in saltwater or polluted water, the aluminum should be washed with soap and water after each use. Saltwater allowed to remain on anodized aluminum will penetrate the anodized coating and attack the aluminum.

Tops with aluminum frames equipped with canvas and/or fiberglass tops and Bimini tops require special attention to the anodized aluminum just below the top. This area is subject to salt build up from salty condensation, heat from the sun, and sea spray. It is also frequently overlooked when the boat is washed and will not be rinsed by the rain. Consequently, the aluminum just below the top is more likely to become pitted than the exposed aluminum on the structure. Make sure the aluminum in this area is washed frequently with soap and water and rinsed thoroughly. Pay particular attention to places where the top material and lacing contact the frame. Once every two months coat the entire frame with a metal protector made for anodized aluminum to protect against pitting and corrosion caused by the harsh effects of saltwater. The anodized aluminum used on your boat was coated with a metal protector called Aluma Guard at the factory. Aluma Guard is a nonabrasive marine metal protector that protects anodized aluminum, stainless steel, brass, and chrome. It also protects colored anodizing from fading and discoloring due to harmful ultraviolet rays. It is available from Rupp Marine Inc., 4761 Anchor Avenue, P.O. Drawer F, Port Salerno, FL 34992.

ONE DRAWBACK TO ALUMA GUARD AND OTHER METAL PROTECTORS IS THAT THEY CAN MAKE THE METAL SLIPPERY. THEREFORE, THEY SHOULD BE NOT BE USED ON TOWER LADDERS, STEERING WHEELS AND OTHER AREAS WHERE A GOOD GRIP AND SURE FOOTING IS IMPORTANT.

Stains can be removed with a metal polish or fine polishing compound. To minimize corrosion, use a caulking compound to bed hardware and fasteners mounted to aluminum fabrications. If the anodized coating is badly scratched it can be touched up with paint. With proper care, anodized aluminum will provide many years of service.

Note: You should contact Pursuit Customer Relations before making any modifications to aluminum fabrications. Unauthorized modifications can void the warranty.

Chrome Hardware
Use a good chrome cleaner and polish on all chrome hardware.

Acrylic Plastic Glass
Acrylic glass scratches easily. Use a soft cloth and mild soap and water to clean acrylic glass. Solvents and products containing ammonia can permanently damage acrylic glass. A coat of automotive or boat wax is beneficial to protect the surface. Do not use the following on acrylic glass:

Abrasive cleaners	Acetone
Solvents	Alcohol
Glass cleaners	Cleaners containing ammonia

Simulated Wood grain Panels
The simulated wood grain instrument and switch panels are made using a special process. Each panel is clear coated with a special exterior finish and hand buffed to obtain a rich deep high gloss wet look. The clear coat is formulated for the marine environment, but basic precautions and regular care are necessary to protect it.

DON'T:
- Drill or cut any holes through the clear coat.
- Rub the finish using a lot of pressure.
- Use any solvent of any kind on the finish.
- Use rubbing compound of any kind on the finish.
- Use any cleaners with ammonia or an abrasive on the finish.
- Use any Scotchbrite™ type product on the finish.
- Use any powder abrasive such as Ajax™ or Soft Scrub™ on the finish.

Preventative Care:
Waxing the wood grain panels will protect against water spots. The rain water is contaminated and if the panels are not waxed, water spots will be apparent. Before using your boat and at regular intervals thereafter, we recommend waxing the panels with one of the following products:

- Premium marine Polish with Teflon
- Starbrite ® #85714 for Paste Wax
- Starbrite ® #85732 for Liquid Wax

Note: Use normal high gloss care products. For best results we recommend Teflon wax manufactured by Starbrite®.

To remove water spots, wipe with mineral spirits and wax using one of the recommended products mentioned above. **Do not use lacquer thinner, acetone or any other solvent on the finish.**

Engine

Proper engine maintenance is essential to the proper performance and reliability of your outboard engine. Maintenance schedules and procedures are outlined in your engine owner's manual. They should be followed exactly.

The age of gasoline can effect engine performance. Chemical changes occur as the gasoline ages that can cause deposits and varnish in the fuel system as well as reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month, a fuel stabilizer should be added to the gasoline to protect the fuel from degradation. Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engine.

Avoid using fuels with alcohol additives. Gasoline that is an alcohol blend will absorb moisture from the air which can reach such concentrations that "phase separation" can occur whereby the water and alcohol mixture becomes heavy enough to settle out of the gasoline to the bottom of the tank. Since the fuel pick up tube is very near the bottom of the tank, phase separation can cause the engine to run very poorly or not at all. This condition is more severe with methyl alcohol and will worsen as the alcohol content increases. Water or a jelly like substance in the fuel filters are an indication of possible phase separation from the use of alcohol blended fuels.

If the boat is used in saltwater, flush the cooling system after each daily use. To flush the system when the boat is out of the water, follow the procedure outlined in your engine owner's manual.

13.2 Upholstery, Canvas and Enclosures

Vinyl Upholstery

The vinyl upholstery used on the exterior seats and bolsters, and for the headliner in some cabins, should be cleaned periodically with mild soap and water. Any stain, spill or soiling should be cleaned up promptly to prevent the possibility of permanent staining. When cleaning, always rub gently. Avoid using products containing ammonia, powdered abrasive cleaners, steel wool, ink, strong solvents, acetone and lacquer solvents or other harsh chemicals as they can cause permanent damage or shorten the life of vinyl. Never use steam heat, heat guns or hair dryers on vinyl.

Stronger cleaners, detergents and solvents may be effective in stain removal, but can cause either immediate damage or slow deterioration. Lotions, sun tan oil, waxes and polishes, etc., contain oils and dyes that can cause stiffening and staining of vinyls.

- Dry soil, dust and dirt - Remove with a soft cloth.
- Dried on dirt - Wash with a soft cloth dampened with water.
- Variations in surface gloss - Wipe with a water dampened soft cloth and allow to air dry.
- Stubborn dirt - Wash with a soft cloth dampened with Ivory Flakes® and water. Rinse with clean water.

- Stubborn spots and stains - Spray with either Fantastik Cleaner® or Tannery Car Care Cleaner® and rub with a soft cloth. Rinse with clean water.
- Liquid spills - Wipe immediately with a clean absorbent cloth. Rinse with clean water.
- Food grease and oily stains - Spray immediately using either Fantastik Cleaner® or Tannery Car Care Cleaner®, wiping with a soft cloth. Take care not to extend the area of contamination beyond its original boundary. Rinse with clean water.

Acrylic Canvas

Acrylic canvas should be cleaned periodically by using a mild soap and water. Scrub lightly and rinse thoroughly to remove the soap. Do not use detergents. The top or accessories should never be folded or stored wet.

After several years, the acrylic canvas may lose some of its ability to shed water. If this occurs, wash the fabric and treat it with a commercially available water proofing designed for this purpose.

Note: Some leakage at the seams is normal and unavoidable with acrylic enclosures.

Side curtains and clear connectors can be cleaned with mild soap and water. They should not be allowed to become badly soiled. Dirt, oil, mildew, and cleaning agents containing ammonia, will shorten the life of the vinyl that is used for clear curtains. After cleaning the curtains and allowing them to dry, apply a non-lemon furniture polish or an acrylic glass and clear plastic protector to extend the life of the curtains.

Vinyl curtains should be stored either rolled or flat, without folds or creases. Folding the curtains will make permanent creases that could cause the vinyl to crack.

DO NOT USE ANY POLISH CONTAINING LEMON SCENTS OR LEMON. THE LEMON JUICE WILL ATTACK THE VINYL AND SHORTEN ITS LIFE.

Snaps should be lubricated periodically with petroleum jelly or silicone grease. Zippers should be lubricated with silicone spray or paraffin.

The bimini top, side curtains, clear connector, back drop and aft curtain must be removed when trailering. Canvas enclosures are not designed to withstand the extreme wind pressure encountered while trailering and will be damaged. Always remove and properly store the enclosure before trailering your boat.

Do not operate engines, fuel consuming heaters or burners with the canvas enclosures closed. The cockpit must be open for legal ventilation and to prevent the possible accumulation of carbon monoxide fumes, which could be lethal.

CARBON MONOXIDE IS A LETHAL, TOXIC GAS THAT IS COLORLESS AND ODORLESS. IT IS A DANGEROUS GAS THAT WILL CAUSE DEATH IN CERTAIN LEVELS.

Cabin Interior

The cabin interior can be cleaned just like you would clean a home interior. To preserve the teak woodwork, use teak oil. To maintain the carpeting, use a vacuum cleaner. Because air and sunlight are very good cleansers, periodically put cushions, sleeping bags, etc. on deck, in the sun and fresh air, to dry and air out. If cushions or equipment get wet with saltwater, remove and use clean, freshwater to rinse off the salt crystals. Salt retains moisture and will cause damage. Dry thoroughly and reinstall.

If mildew forms on the carpet-like headliner material, it can be cleaned with a solution of five parts water to one part bleach. Remove all cushions, pillows and cabin sole carpet that could be damaged by the bleach and make sure that all windows, hatches and doors are open while using the bleach solution. Wear rubber gloves to protect your skin and follow all the precautions listed on the bleach bottle label. Completely ventilate the cabin and allow the headliner to dry thoroughly before using the cabin or closing the hatches and doors.

If you leave the boat for a long period of time, put all cushions on their sides, open all interior cabin and locker doors, and hang a commercially available mildew protector in the cabin.

ALWAYS READ THE LABEL CAREFULLY ON MILDEW PROTECTORS. REMOVE THE PROTECTOR AND ALLOW THE CABIN TO VENTILATE COMPLETELY BEFORE USING THE CABIN.

13.3 Bilge

To keep the bilge clean and fresh, it is recommended that you use a commercial bilge cleaner on a regular basis. Follow the directions carefully. All exposed pumps and metal components in the bilge should be sprayed periodically with a protector to reduce the corrosive effects of the high humidity always present in these areas.

Periodically check the bilge pumps for proper operation and clean debris from the strainers and float switches. Inspect all hoses, clamps and thru hulls for leaks and tightness on a regular basis and operate all thru hull valves at least once a month to keep them operating properly.

13.4 Drainage System

It is essential that the following items be done periodically to maintain proper drainage of your boat:

- Clean the cockpit drains with a hose to remove debris that can block water drainage.
- Clean the hardtop or T-top leg drain holes. This is especially important just before winter lay-up.
- Frequently test the automatic bilge pump switches for proper operation.
- Flush all gravity drains with freshwater to keep them clean and free flowing.

Note: All drains and pumps must be properly winterized before winter lay-up.

NEVER USE HARSH CHEMICAL DRAIN CLEANERS IN MARINE DRAIN SYSTEMS. PERMANENT DAMAGE TO THE HOSES AND FITTINGS MAY RESULT.

Chapter 14:
SEASONAL MAINTENANCE

14.1 Lay-up and Storage

Before Storing

- If your boat is equipped with a portable marine head with a pump out, it must be pumped prior to lay-up. Flush the holding tank using clean soap, water and a deodorizer. Pump out the cleaning solution.

- The fuel tank should be left nearly full to reduce condensation that can accumulate in the fuel tank. Allow enough room in the tank for the fuel to expand without leaking out the vents. Moisture from condensation in the fuel tank can reach such concentrations that it becomes heavy enough to settle out of the gasoline to the bottom of the tank. Since fuel pickup tubes are located near the bottom of the tank, this accumulated moisture can cause the engine to run poorly or not at all after extended storage.

  Chemical changes also occur as the gasoline ages that can cause deposits and varnish in the fuel system as well as reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines.

  Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month or during winter storage, a fuel stabilizer should be added to the gasoline to help protect the fuel system from these problems. Operate the boat for at least 15 minutes after adding the stabilizer to allow the treated fuel to reach the engine.

  Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engine. For more recommendations for your specific area, check with your local Pursuit dealer.

- Drain water from the freshwater system.

- **Consult the engine owner's manual for detailed information on preparing the engines for storage.**

Lifting

BOATS HAVE BEEN DAMAGED FROM IMPROPER LIFTING AND ROUGH HANDLING WHEN BEING TRANSPORTED BY LIFT TRUCKS. CARE AND PROPER HANDLING PROCEDURES MUST BE USED WHEN USING A LIFT TRUCK TO MOVE THE BOAT. NEVER ATTEMPT TO LIFT THE BOAT WITH A SUBSTANTIAL AMOUNT OF WATER IN THE BILGE.

SEVERE GELCOAT CRAZING OR MORE SERIOUS HULL DAMAGE CAN OCCUR DURING HAULING AND LAUNCHING IF PRESSURE IS CREATED ON THE GUNWALES (SHEER) BY THE SLINGS. SPREADERS ARE NOT REQUIRED IF BELTS ARE NOT CREATING PRESSURE (CABLE DRUMS FURTHER APART THAN BEAM OF BOAT). FLAT, WIDE BELTING SLINGS AND SPREADERS LONG ENOUGH TO KEEP PRESSURE FROM THE GUNWALES IS ESSENTIAL. DO NOT ALLOW ANYONE TO HAUL YOUR BOAT WHEN THE SPREADERS ON THE LIFT ARE NOT WIDE ENOUGH TO TAKE THE PRESSURE OFF THE GUNWALES.

Supporting The Boat For Storage

Your trailer or a well-made cradle is the best support for your boat during storage. When storing the boat on a trailer for a long period:

- Make sure the rollers and pads properly support the hull of the boat and do not put pressure on the hull lifting strakes.
- Make sure the trailer is on a level surface and the bow is high enough so that water will drain from the bilge.
- Make sure the engines are in the down position.
- Check the tires once each season. Add enough air for the correct amount of inflation for the tires.

Note: Read the owner's manual for the trailer for the correct amount of inflation for the tires.

When storing the boat on a cradle:

- The cradle must be specifically for boat storage.
- Make sure the cradle is well supported and placed on a level surface with the bow high enough to provide proper drainage of the bilge.
- Make sure the engines are in the down position.

- The cradle must be in the proper fore and aft position to properly support the hull. When the cradle is in the correct location, the bunks should match the bottom of hull and should not be putting pressure on the lifting strakes.

BOATS HAVE BEEN DAMAGED BY TRAILERS AND CRADLES THAT DON'T PROPERLY SUPPORT THE HULL. ALWAYS MAKE SURE THE BUNKS AND ROLLERS ARE ADJUSTED SO THEY ARE NOT PUTTING PRESSURE ON THE LIFTING STRAKES AND ARE PROVIDING ENOUGH SUPPORT FOR THE HULL. HULL DAMAGE RESULTING FROM IMPROPER CRADLE OR TRAILER SUPPORT IS NOT COVERED BY THE KODIAK WARRANTY.

Preparing The Boat For Storage

- Remove the bilge drain plug, if installed.

- Thoroughly wash the fiberglass exterior, especially the antifouling portion of the bottom. Remove as much marine growth as possible. Lightly wax the exterior fiberglass components.

- Remove all oxidation from the exterior hardware, and apply a light film of moisture displacing lubricant.

- Remove the propeller and grease the propeller shaft using light waterproof grease.

- Remove the batteries and store in a cool place. Clean using clear, clean water. Be sure the batteries have sufficient water and clean terminals. Keep the batteries charged and safe from freezing throughout the storage period.

- Refer to the Electrical System chapter, for information on the maintenance of the DC electrical systems.

- Coat all faucets and exposed electrical components in the cockpit with a protecting oil.

- Clean out, totally drain and completely dry the fishboxes and livewells.

- Clean the exterior upholstery with a good vinyl cleaner and dry thoroughly.

- Remove as many cushions and open as many locker doors as possible. Leaving as many of these areas open as possible will improve the boat's ventilation during the storage period.

14.2 Winterizing

Raw Water System
Completely drain the raw water systems. Disconnect all hoses and blow the water from the system. Use only very low air pressure when doing this to prevent possible system damage. Because of the check valve mechanism built in the raw water washdown and livewell pumps, blowing the lines will not remove the water from that raw water pump. Remove the inlet and outlet hoses on the pumps. Turn each pump on and allow it to pump out any remaining water....about a cupful. A recommended alternative to the above-mentioned procedure is the use of commercially available nontoxic, potable water system antifreeze. If potable water antifreeze is used, pour the mixture into a pail and put the raw water intake lines into the solution. Run the pumps one at a time until the antifreeze solution is visible at all raw water faucets and discharge fittings and drains. Be sure antifreeze has flowed through all of the raw water drains.

For additional information, refer to the Raw Water System chapter.

Freshwater System (Optional)
The entire freshwater system must be completely drained. Disconnect all hoses, check valves, etc. and blow all the water from the system. Make sure the freshwater tank is completely drained. Use only very low air pressure when doing this to prevent possible system damage. Because of the check valve mechanism built in the pump, blowing the lines will not remove the water from the freshwater pump. Remove the inlet and outlet hoses on the pump. Turn the pump on and allow it to pump out any remaining water....about a cupful. A recommended alternative to the above-mentioned procedure is the use of commercially available non toxic, freshwater system antifreeze. After draining the potable water tank and lines, pour the antifreeze mixture into the freshwater tank, prime and operate the pump until the mixture flows from all freshwater faucets. Be sure to open all freshwater faucets, including the freshwater spray head in the leaning post bait station sink. Make sure antifreeze has flowed through all of the freshwater drains.

For additional information, refer to the Freshwater System chapter.

Bilge
Coat all metal components, wire busses, and connector plugs in the bilge with a protecting oil. It is also important to protect all pumps, seacocks and steering components.

The bilge pump and bilge pump lines must be completely free of water and dried out when the boat is laid-up for the winter in climates where freezing occurs. Compartments in the bilge that will not drain completely should be pumped out and then sponged until completely free of water.
Dry the hull bilge and self-bailing cockpit troughs. Water freezing in these areas could cause damage.

Portable Head
The portable head must be properly winterized by following the manufacturer's winterizing instructions in the portable head owner's manual.

Special Notes Prior To Winter Storage

If the boat will be in outside storage, properly support a storage cover and secure it over the boat. It is best to have a frame built over the boat to support the canvas. It should be a few inches wider than the boat so the canvas will clear the rails and allow passage of air. If this cover is fastened too tightly there will be inadequate ventilation and this can lead to mildew, moisture accumulation, etc. It is essential to fasten the canvas down securely so that the winds cannot remove it or cause chafing of the hull superstructure. Do not store the boat in a damp storage enclosure. Excessive dampness can cause electrical problems, corrosion, and excessive mildew.

Whenever possible, do not use the bimini top or other canvas in place of the winter storage cover. The life of these canvases may be significantly shortened if exposed to harsh weather elements for long periods.

PLACING AN ELECTRIC OR FUEL BURNING HEATING UNIT IN THE BOAT CAN BE POTENTIALLY HAZARDOUS AND IS NOT RECOMMENDED.

Proper storage is very important to prevent serious damage to the boat. If the boat is to be stored indoors, make sure the building has enough ventilation. It is very important that there is enough ventilation both inside the boat and around the boat.

14.3 Recommissioning

DO NOT OPERATE THE BOAT UNLESS IT IS COMPLETELY ASSEMBLED. KEEP ALL FASTENERS TIGHT. KEEP ADJUSTMENTS ACCORDING TO SPECIFICATIONS.

IT IS IMPORTANT AND RECOMMENDED THE FITTING OUT PROCEDURE FOR THE MARINE GEAR BE DONE BY A QUALIFIED SERVICE PERSON. READ THE ENGINE OWNER'S MANUAL FOR THE RECOMMENDED PROCEDURE.

BEFORE LAUNCHING THE BOAT, MAKE SURE THE DRAIN PLUG IS INSTALLED.

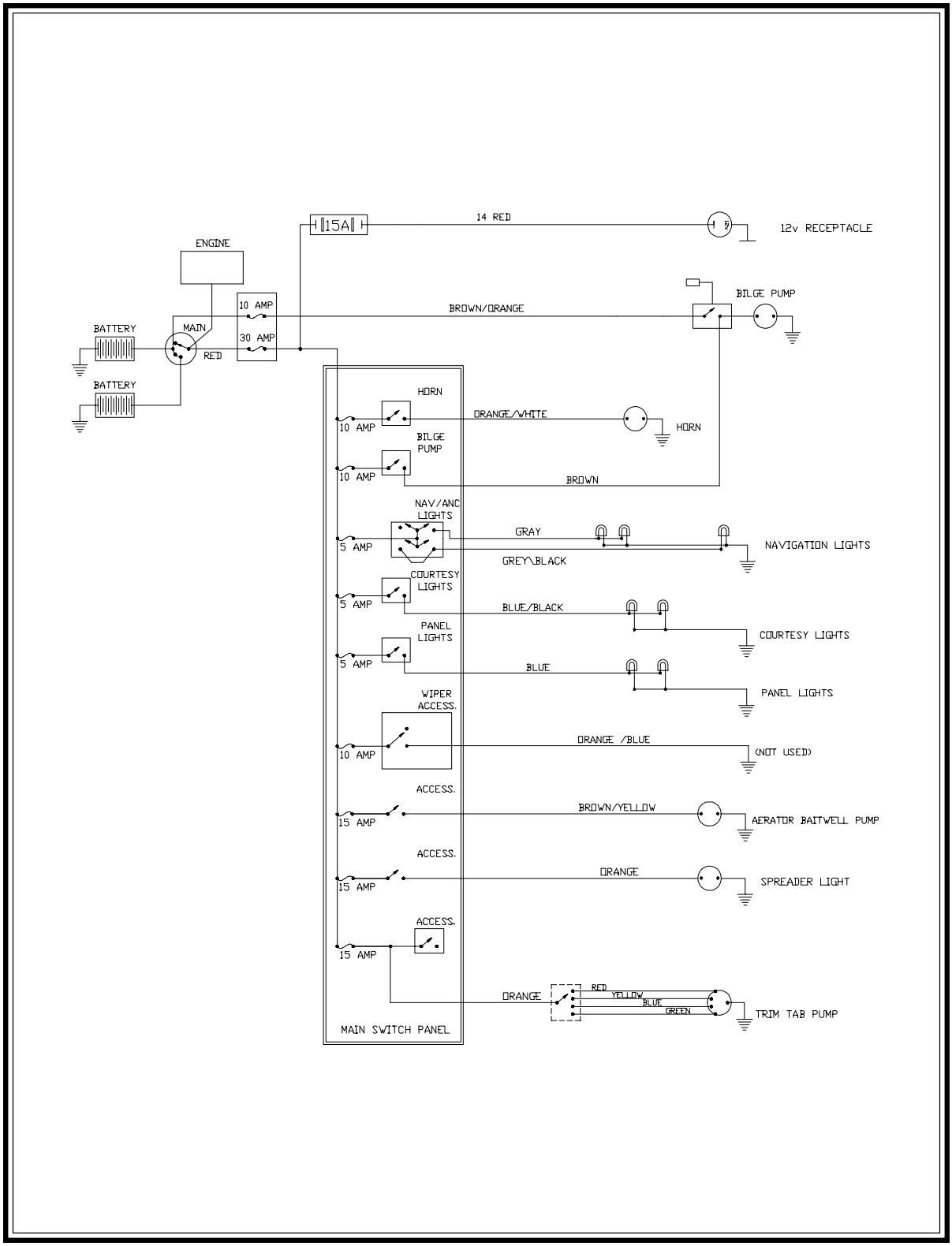
Reactivating The Boat After Storage

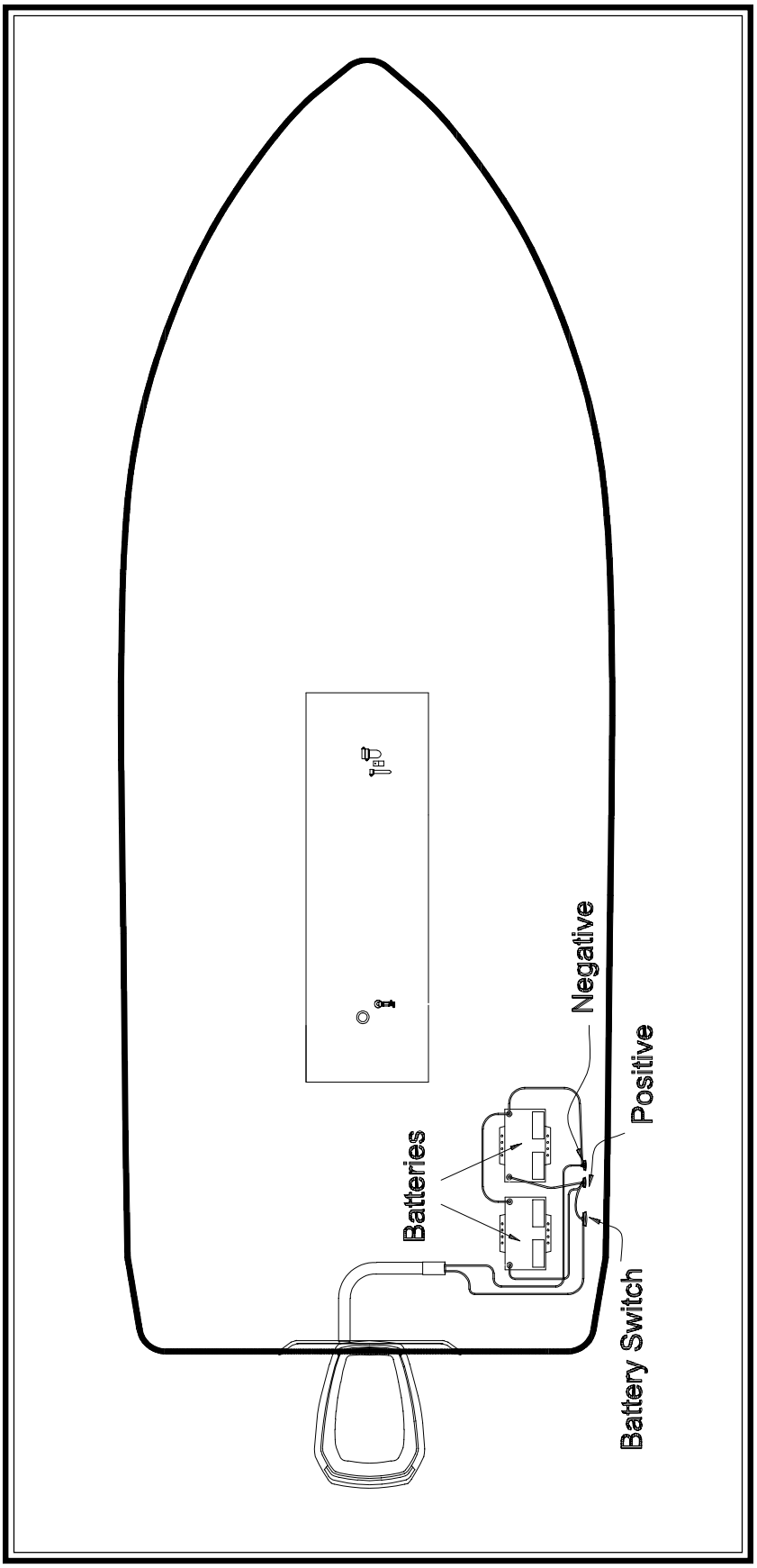
- Charge and install the batteries.
- Install the drain plugs in the hull.
- Check the engine for damage and follow the manufacturer's instructions for recommissioning.
- Perform all routine maintenance.
- Check all hose clamps for tightness.
- Pump the antifreeze from the water systems and flush several times with fresh water.
- Check and lubricate the steering system.
- Clean and wash the boat.
- Install all cushions and canvas.

After Launching

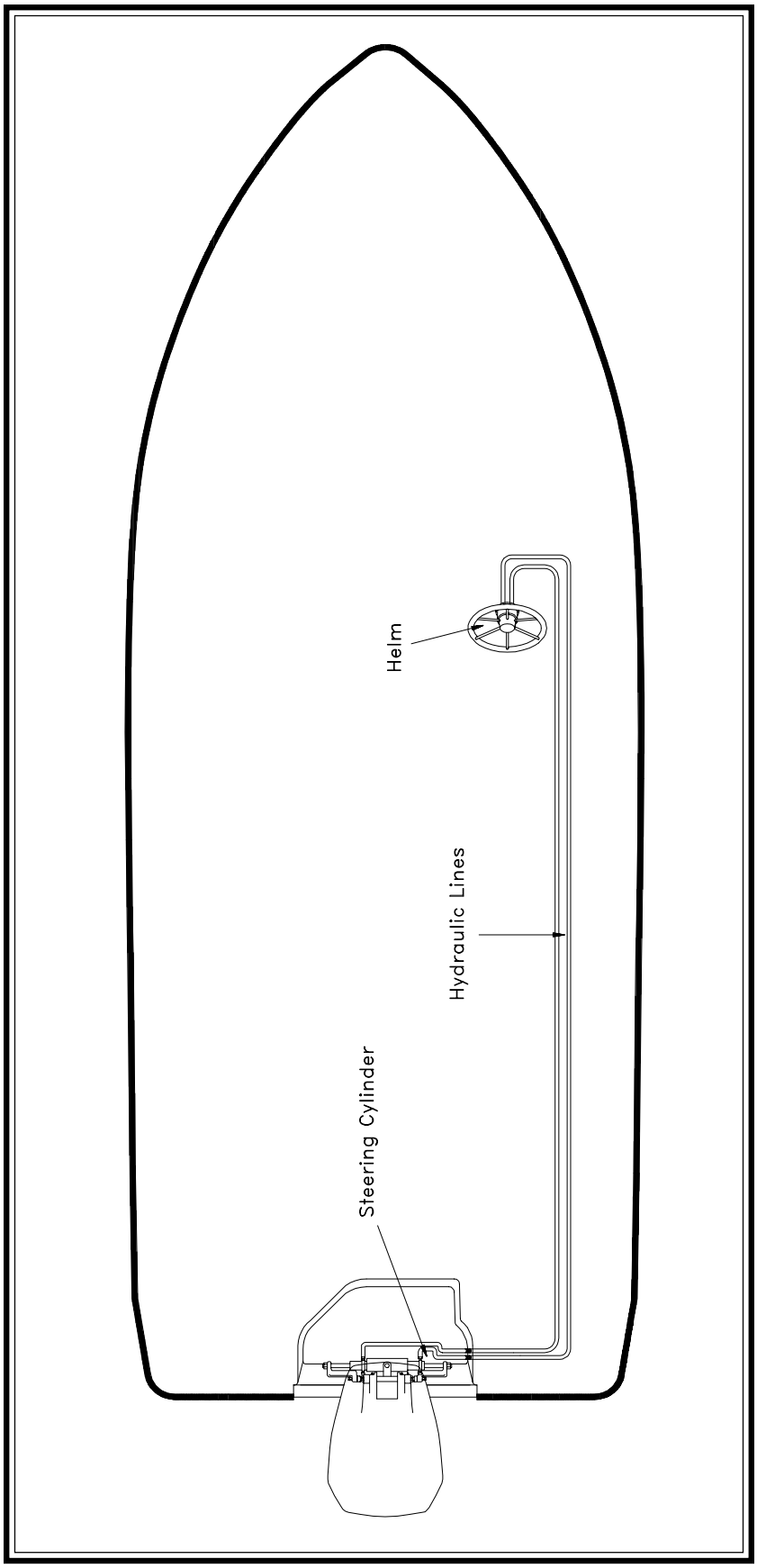
- Carefully check all water systems for leaks. Operate each system one at a time checking for leaks and proper operation.
- Check the bilge pump manual and automatic switches.
- Carefully monitor the gauges and check for leakage and abnormal noises.
- Operate the boat at slow speeds until the engine temperature stabilizes and all systems are operating normally.
- Carefully check all water systems and the engine hoses for leaks. Operate each system one at a time checking for leaks and proper operation.

Chapter 15:
SCHEMATICS

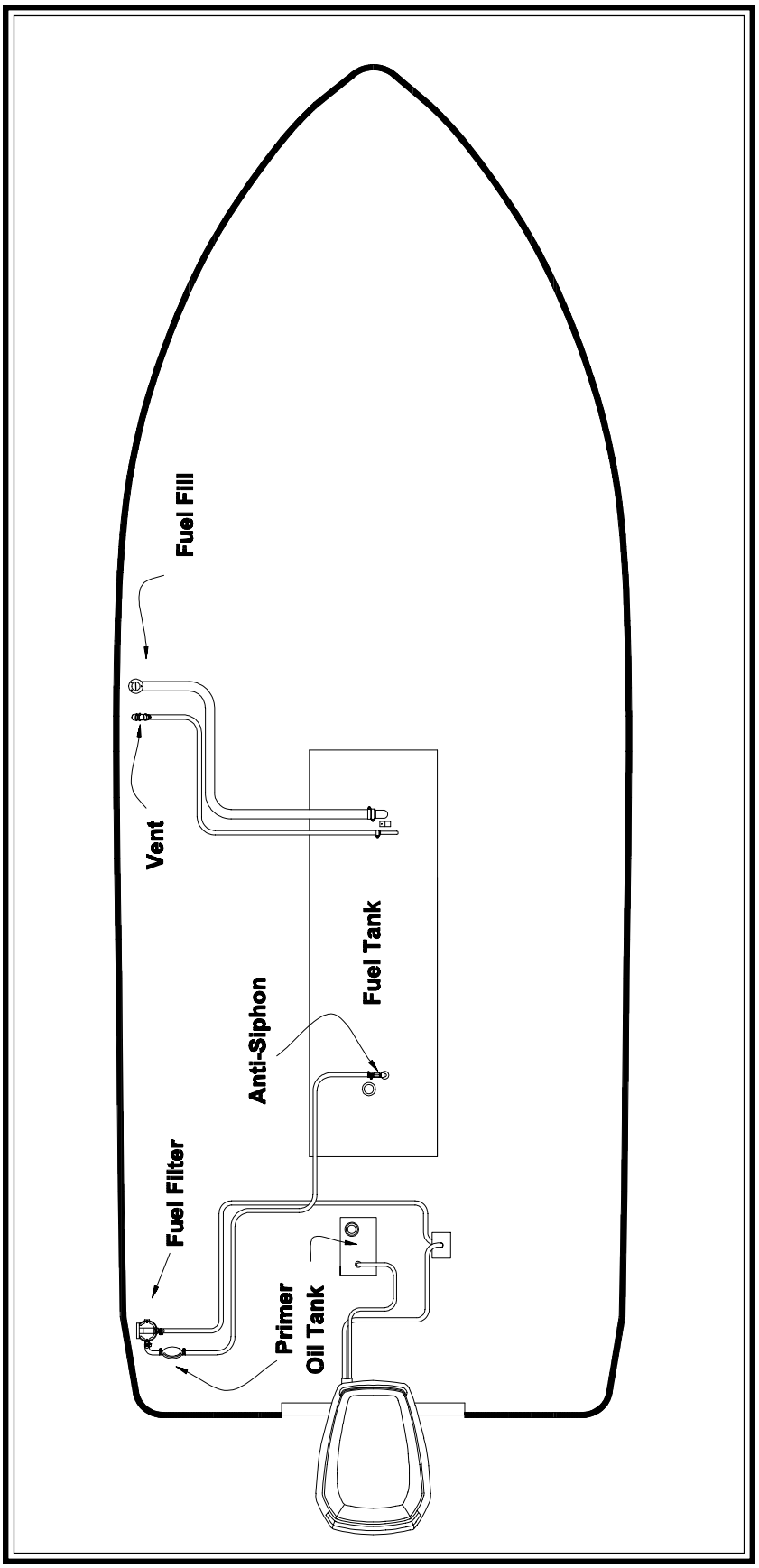




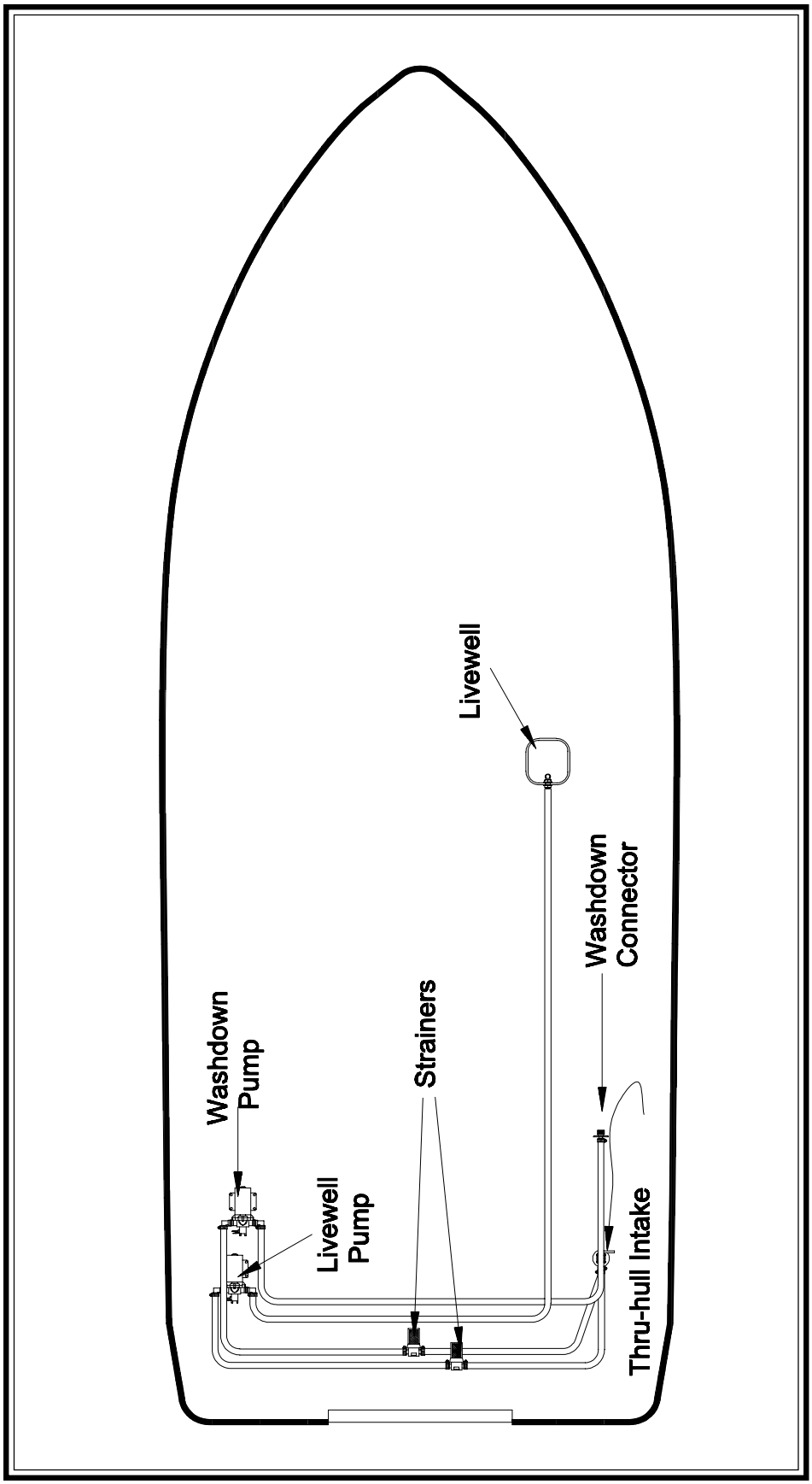
Battery Wiring



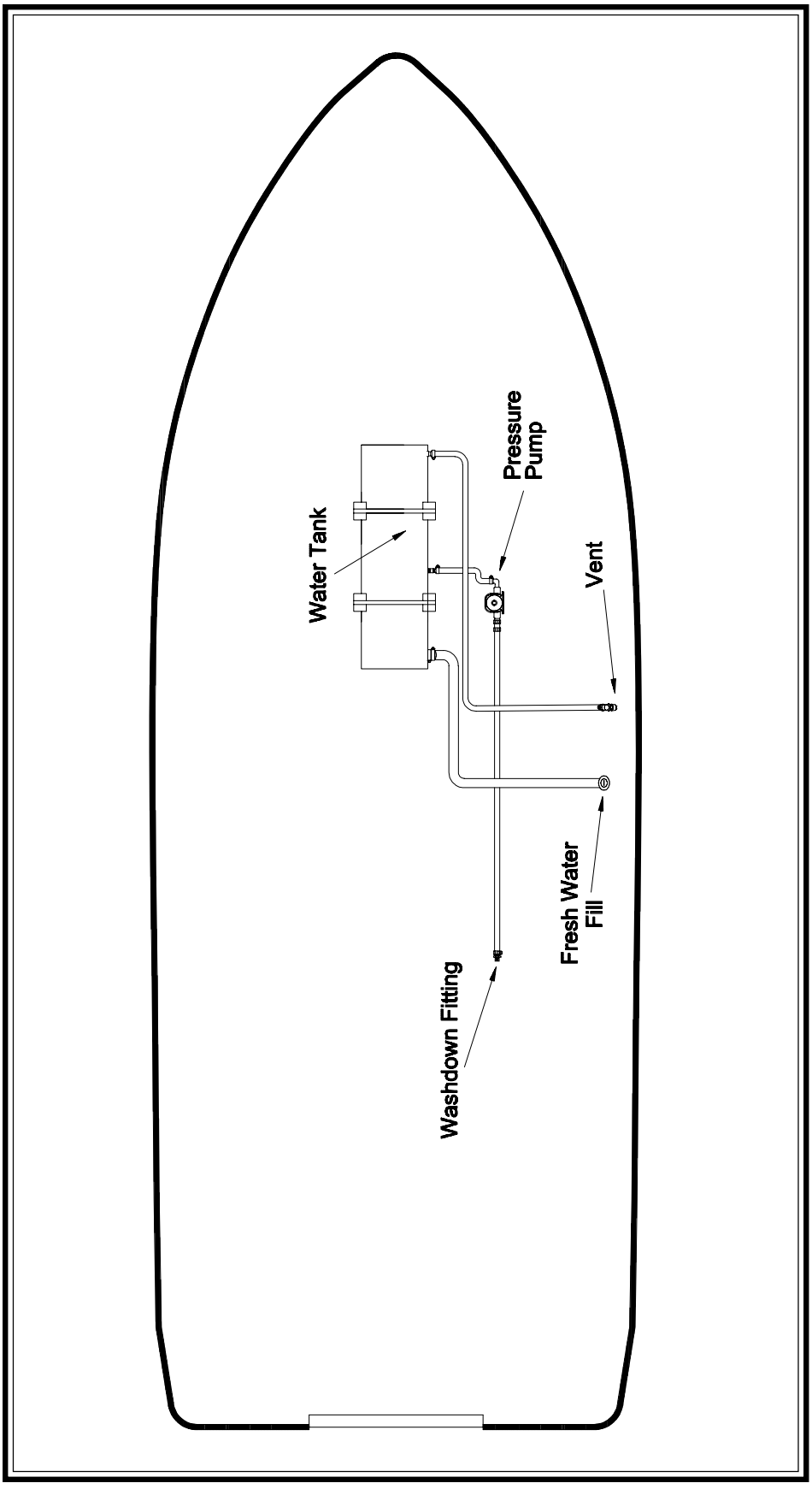
Hydraulic Steering System


Fuel Fill
Vent
Fuel Tank
Anti-Siphon
Fuel Filter
Primer
Oil Tank

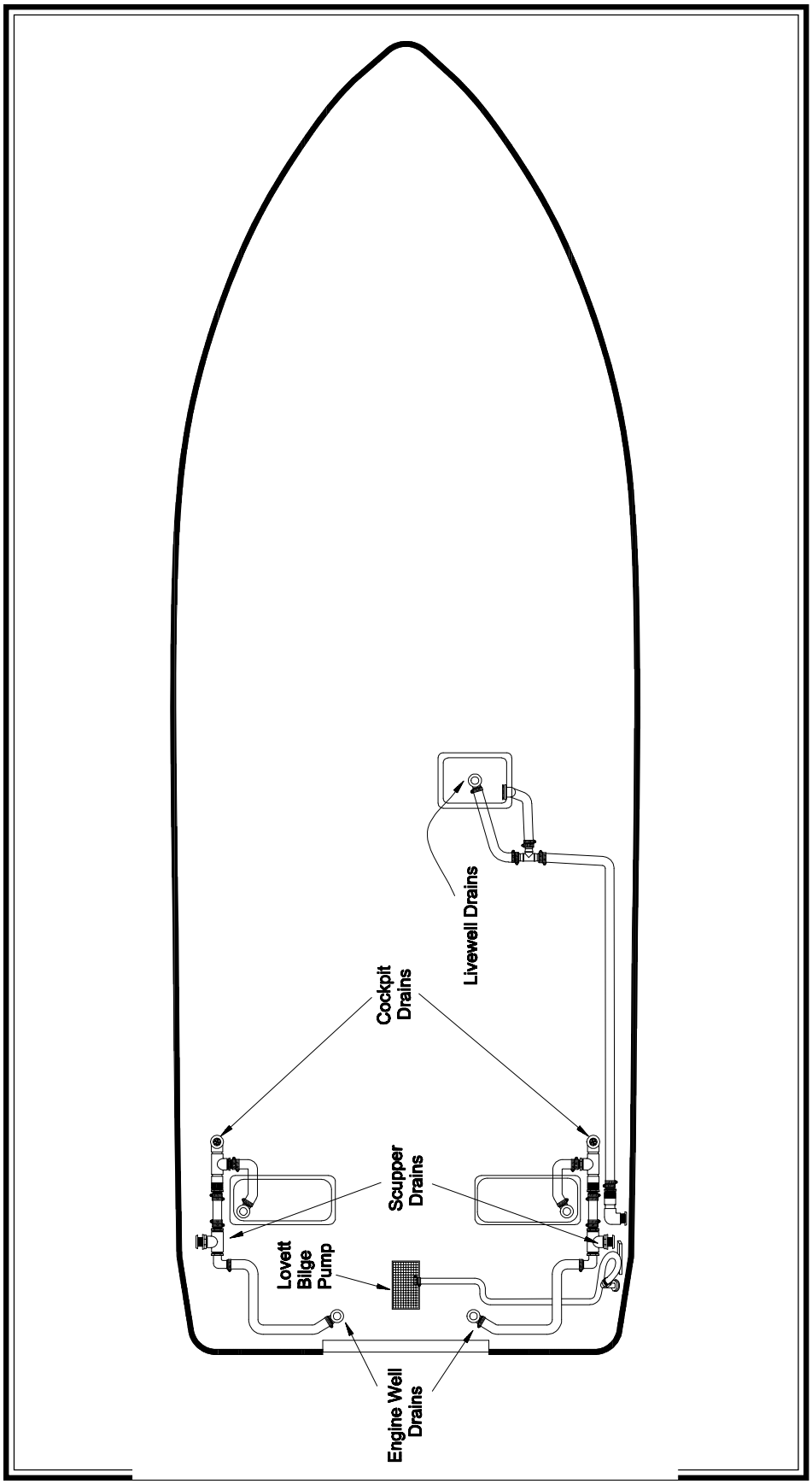
Fuel System



Raw Water System



Freshwater System



Drainage System

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Appendix A:
GLOSSARY OF TERMS

Aft: In, near, or toward the stern of a boat.

Aground: A boat stuck on the bottom.

Amidship: In or toward the part of a boat midway between the bow and stern.

Anchor: A specially shaped heavy metal device designed to dig efficiently into the bottom under a body of water and hold a boat in place.

Anchorage: An area specifically designated by governmental authorities in which boats may anchor.

Ashore: On shore.

Astern: Behind the boat, to move backwards.

Athwartship: At right angles to the center line of the boat.

Barnacles: Small, hard-shelled marine animals which are found in saltwater attached to pilings, docks and bottoms of boats.

Beam: The breadth of a boat usually measured at its widest part.

Bearing: The direction of an object from the boat, either relative to the boat's direction or to compass degrees.

Berth: A bunk or a bed on a boat.

Bilge: The bottom of the boat below the flooring.

Bilge Pump: A pump that removes water that collects in the bilge.

Boarding: Entering or climbing into a boat.

Boarding Ladder: Set of steps temporarily fitted over the side of a boat to assist persons coming aboard.

Boat Hook: Short shaft of wood or metal with a hook fitting at one end shaped to aid in extending one's reach from the side of the boat.

Bow: The front end of a boat's hull.

Bow Line: A line that leads forward from the bow of the boat.

Bow Rail: Knee high rails of solid tubing to aid in preventing people from falling overboard.

Bridge: The area from which a boat is steered and controlled.

Bridge Deck: A deck forward and usually above the cockpit deck.

Broach: When the boat is sideways to the seas and in danger of capsizing; a very dangerous situation that should be avoided.

Bulkhead: Vertical partition or wall separating compartments of a boat.

Cabin: Enclosed superstructure above the main deck level.

Capsize: When a boat lays on its side or turns over.

Chock: A deck fitting, usually of metal, with inward curving arms through which mooring or anchor lines are passed so as to lead them in the proper direction both on board and off the boat.

Cleat: A deck fitting, usually of metal with projecting arms used for securing anchor and mooring lines.

Closed Cooling System: A separate supply of freshwater that is used to cool the engine and circulates only within the engine.

Coaming: A vertical piece around the edges of cockpit, hatches, etc. to stop water on deck from running below.

Cockpit: An open space, usually in the aft deck, outside of the cabin.

Companionway: Opening in the deck of a boat to provide access below.

Compartment: The interior of a boat divided off by bulkheads.

Cradle: A framework designed to support a boat as she is hauled out or stored.

Cutlass Bearing: A rubber bearing in the strut that supports the propeller shaft.

Deck: The floor-like platform of a boat that covers the hull.

Displacement: The volume of water displaced by the hull. The displacement weight is the weight of this volume of water.

Draft: The depth of water a boat needs to float.

Dry Rot: A fungus attack on wood areas.

Dry-dock: A dock that can be pumped dry during boat construction or repair.

Electrical Ground: A connection between an electrical connector and the earth.

Engine Beds: Sturdy structural members running fore-and-aft on which the inboard engines are mounted.

EPIRP: Emergency Position Indicating Radio Beacon. Operates as a part of a worldwide satellite distress system.

Even Keel: When a boat floats properly as designed.

Fathom: A measure of depth. One Fathom = 6 feet.

Fender: A soft object of rubber or plastic used to protect the topsides from scarring and rubbing against a dock or another vessel.

Fend off: To push or hold the boat off from the dock or another boat.

Flying Bridge: A control station above the level of the deck or cabin.

Flukes: The broad portions of an anchor which dig into the ground.

Fore: Applies to the forward portions of a boat near the bow.

Foundering: When a boat fills with water and sinks.

Freeboard: The height from the waterline to the lowest part of the deck.

Galley: The kitchen of a boat.

Grab Rail: Hand-hold fittings mounted on cabin tops or sides for personal safety when moving around the boat, both on deck and below.

Ground Tackle: A general term including anchors, lines, and other gear used in anchoring.

Grounds: A boat touches the bottom.

Gunwale: The upper edge of a boat's side.

Harbor: An anchorage which provides reasonably good protection for a boat, with shelter from wind and sea.

Hatch: An opening in the deck with a door or lid to allow for access down into a compartment of a boat.

Head: A toilet on a boat.

Heat Exchanger: Used to transfer the heat that is picked up by the closed cooling system to the raw cooling water.

Helm: The steering and control area of a boat.

Hull: The part of the boat from the deck down.

Inboard: A boat with the engine mounted within the hull of the boat. Also refers to the center of the boat away from the sides.

Inboard/outboard: Also stern drive or I/O. A boat with an inboard engine attached to an outboard drive unit.

Keel: A plate or timber plate running lengthwise along the center of the bottom of a boat.

Knot: Unit of speed indicating nautical miles per hour. 1 knot = 1 nautical mile per hour (1.15 miles per hour). A nautical mile is equal to one minute of latitude; 6076 feet. Knots times 1.15 equals miles per hour. Miles per hour times .87 equals knots.

Lay-up: To decommission a boat for the winter (usually in northern climates).

Lee: The side that is sheltered from the wind.

Leeward: The direction toward which the wind is blowing.

Length On The Waterline (l.w.l.): A length measurement of a boat at the waterline from the stern to where the hull breaks the water near the bow.

Limber Hole: A passage cut into the lower edges of floors and frames next to the keel to allow bilge water to flow to the lowest point of the hull where it can be pumped overboard.

Line: The term used to describe a rope when it is on a boat.

Lists: A boat that inclines to port or starboard while afloat.

L.O.A.: Boat length overall.

Locker: A closet, chest or box aboard a boat.

Log: An instrument for measuring a boat's speed.

Loran: An electronic navigational instrument which monitors the boat's position using signals emitted from pairs of transmitting stations.

Lunch hook: A small light weight anchor typically used instead of the working anchor. Normally used in calm waters with the boat attended.

Midship: The center of the boat.

Marine Ways or Railways: Inclined planes at the water's edge onto which boats are hauled.

Moored: A boat secured with cables, lines or anchors.

Mooring: An anchor permanently embedded in the bottom of a harbor that is used to secure a boat.

Nautical Mile: A unit of measure equal to one minute of latitude. (6076 feet)

Nun buoy: A red or red striped buoy of conical shape.

Outboard: A boat designed for an engine to be mounted on the transom. Also a term that refers to objects away from the center line or beyond the hull sides of a boat.

Pad Eye: A deck fitting consisting of a metal eye permanently secured to the boat.
Pier: A structure which projects out from the shoreline.

Piles or Piling: A long column driven into the bottom to which a boat can be tied.

Pitching: The fore and aft rocking motion of a boat as the bow rises and falls.

Pitch: The measure of the angle of a propeller blade. Refers to the theoretical distance the boat travels with each revolution of the propeller.

P.F.D.: Personal Flotation Device.

Port: The left side of the boat when facing the bow.

Porthole (port): The opening in the side of a boat to allow the admittance of light and air.

Propeller: A device having two or more blades that is attached to the engine and used for propelling a boat.

Propeller Shaft: Shaft which runs from the back of the engine gear box, aft, through the stuffing box, shaft log, struts, and onto which the propeller is attached.

Pyrotechnic Distress Signals: Distress signals that resemble the brilliant display of flares or fireworks.

Raw Water Cooled: Refers to an engine cooling system that draws seawater in through a hull fitting or engine drive unit, circulates the water in the engine, and then discharges it overboard.

Reduction Gear: Often combined with the reverse gear so that the propeller, turns at a slower rate than the engine.

Reverse Gear: Changes the direction of rotation of the propeller to provide thrust in the opposite direction for stopping the boat or giving it sternway.

Roll: A boat's sidewise rotational motion in rough water.

Rope Locker: A locker, usually located in the bow of a boat, used for stowing the anchor line or chain.

Rubrail: Railing (often rubber or hard plastic) that runs along the boat's sheer to protect the hull when coming alongside docks, piers, or other boats.

Rudder: A moveable flat surface that is attached vertically at or near the stern for steering.

Sea anchor: An anchor that does not touch the bottom. Provides drag to hold the bow in the most favorable position in heavy seas.

Scupper: An opening in the hull side or transom of the boat through which water on deck or in the cockpit is drained overboard.

Seacock: Safety valves installed just inside the thru-hull fittings and ahead of the piping or hose running from the fittings.

Shaft log: Pipe through which the propeller shaft passes.

Sheer: The uppermost edge of the hull.

Sling: A strap which will hold the boat securely while being lifted, lowered, or carried.

Slip: A boat's berth between two pilings or piers.

Snub: To tighten a line suddenly.

Sole: The deck of a cockpit or interior cabin.

Spring Line: A line that leads from the bow aft or from the stern forward to prevent the boat from moving ahead or astern.

Starboard: The right side of a boat when facing the bow.

Steerageway: Sufficient speed to keep the boat responding to the rudder or drive unit.

Stem: The vertical portion of the hull at the bow.

Stern: The rear end of a boat.

Stow: To pack away neatly.

Stringer: Longitudinal members fastened inside the hull for additional structural strength.

Strut: Mounted to the hull which supports the propeller shaft in place.

Strut Bearing: See “cutlass bearing.”

Stuffing Box: Prevents water from entering at the point where the propeller shaft passes through the shaft log.

Superstructure: Something built above the main deck level.

Swamps: When a boat fills with water from over the side.

Swimming Ladder: Much the same as the boarding ladder except that it extends down into the water.

Taffrail: Rail around the rear of the cockpit.

Thru-hull: A fitting used to pass fluids (usually water) through the hull surface, either above or below the waterline.

Topsides: The side skin of a boat between the waterline or chine and deck.

Transom: A flat stern at right angles to the keel.

Travel Lift: A machine used at boat yards to hoist boats out of and back into the water.

Trim: Refers to the boat's angle or the way it is balanced.

Trough: The area of water between the crests of waves and parallel to them.

Twin-Screw Craft: A boat with two propellers on two separate shafts.

Underway: When a boat moves through the water.

Wake: Disrupted water that a boat leaves astern as a result of its motion.

Wash: The flow of water that results from the action of the propeller or propellers.

Waterline: The plane of a boat where the surface of the water touches the hull when it is afloat on even keel.

Watertight Bulkhead: Bulkheads secured so tightly so as not to let water pass.

Wharf: A structure generally parallel to the shore.

Working Anchor: An anchor carried on a boat for most normal uses. Refers to the anchor used in typical anchoring situations.

Windlass: A winch used to raise and lower the anchor.

Windward: Toward the direction from which the wind is coming.

Yacht Basin: A protected facility primarily for recreational small craft.

Yaw: When a boat runs off her course to either side.

THIS PAGE WAS LEFT BLANK INTENTIONALLY

Appendix B:

MAINTENANCE LOG

Date	Hours	Dealer	Service/Repairs

MAINTENANCE LOG

Date	Hours	Dealer	Service/Repairs

MAINTENANCE LOG

Date	Hours	Dealer	Service/Repairs

MAINTENANCE LOG

Date	Hours	Dealer	Service/Repairs

MAINTENANCE LOG

Date	Hours	Dealer	Service/Repairs

MAINTENANCE LOG

Date	Hours	Dealer	Service/Repairs

Appendix C:

DEPARTMENT OF TRANSPORTATION U.S. COAST GUARD C.G. 1865 (REV. 1/88)	**BOATING ACCIDENT REPORT**	FORM APPROVED OMB NO.211-0010

The operator/owner of a vessel used for recreational purposes is required to file a report in writing whenever an accident results in: loss of life or disappearance from a vessel, or an injury which requires medical treatment beyond first aid: or property damage in excess of $200 or complete loss of the vessel. Reports in death and injury cases must be submitted within 48 hours. Reports in other cases must be submitted within 10 days. Reports must be submitted to reporting authority in the State where the accident occurred. This form is provided to assist the operator in filing the required written report.

COMPLETE ALL BLOCKS (indicate those not applicable by "NA")

NAME AND ADDRESS OF OPERATOR	AGE OF OPERATOR DATE OF BIRTH	OPERATOR'S EXPERIENCE This type of boat / Other boat operating Exp. [ ] Under 20 Hours / [ ] Under 20 Hours [ ] 20 to 100 Hours / [ ] 20 to 100 Hours [ ] 100 to 500 Hours / [ ] 100 to 500 Hours [ ] Over 500 Hours / [ ] Over 500 Hours
OPERATOR TELEPHONE NUMBER	OWNER TELEPHONE NO.	
NAME AND ADDRESS OF OWNER	RENTED BOAT [ ] YES [ ] NO / NUMBER OF PERSONS ON BOARD	FORMAL INSTRUCTION IN BOATING SAFETY [ ] None [ ] State [ ] U.S. Power Squadrons [ ] USCG Auxiliary [ ] American Red Cross [ ] Other (Specify) _____

VESSEL NO. (this vessel)

BOAT REGISTER. NO.	BOAT NAME	BOAT MAKE	BOAT MODEL	MFR HULL IDENTIFICATION NO.
TYPE OF BOAT [ ] Open Motorboat [ ] Cabin Motorboat [ ] Auxiliary Sail [ ] Sail (only) [ ] Rowboat [ ] Canoe [ ] Other (Specify)	HULL MATERIAL [ ] Wood [ ] Aluminum [ ] Steel [ ] Fiberglass [ ] Rubber/vinyl [ ] Other (Specify)	ENGINE [ ] Outboard [ ] Inboard gasoline [ ] Inboard diesel [ ] Inboard-outdrive [ ] Jet [ ] Other (Specify)	PROPULSION No. of engines _____ Horse Power (total) _____ Type of fuel _____ Has boat had a Safety Examination? [ ] Outboard [ ] NO For current year? [ ] YES [ ] NO Year _____ Indicate whether [ ] USCG Auxiliary Courtesy Marine Exam [ ] State/local examination [ ] Other	CONSTRUCTION Length _____ Year built (boat) _____

ACCIDENT DATA

DATE OF ACCIDENT	TIME am pm	NAME OF BODY OF WATER	LOCATION (Give location precisely) Lat Long
STATE	NEAREST CITY OR TOWN		COUNTY

WEATHER	WATER CONDITIONS	TEMPERATURE (Estimate)	WIND	VISIBILITY DAY / NIGHT
[ ] Clear [ ] Rain [ ] Cloudy [ ] Snow [ ] Fog [ ] Hazy	[ ] Calm (waves less than 6") [ ] Choppy (waves 6" to 2') [ ] Rough (greater than 6') [ ] Strong Current	Air _____ F° Water _____ F°	[ ] None [ ] Light (0 - 6mph) [ ] Moderate (7 - 14 mph) [ ] Strong (15 - 25 mph) [ ] Storm (Over 25 mph)	[ ] Good [ ] [ ] Fair [ ] [ ] Poor [ ]

OPERATION AT TIME OF ACCIDENT (Check all applicable)		TYPE OF ACCIDENT (Check all applicable)		WHAT IN YOUR OPINION CONTRIBUTED TO THE ACCIDENT (Check all applicable)	
[ ] Commercial Activity	[ ] Drifting	[ ] Grounding	[ ] Collision with Fixed Object	[ ] Weather	[ ] Alcohol use
[ ] Cruising	[ ] At Anchor	[ ] Capsizing		[ ] Excessive speed	[ ] Drug use
[ ] Maneuvering	[ ] Tied to Dock	[ ] Flooding	[ ] Collision with Floating Object	[ ] No Proper Lookout	[ ] Fault of Hull
[ ] Approaching Dock	[ ] Fueling	[ ] Sinking		[ ] Restricted Vision	[ ] Fault of Machinery
[ ] Leaving Dock	[ ] Fishing	[ ] Fire or explosion (fuel)	[ ] Falls Overboard	[ ] Overloading	[ ] Fault of Equipment
[ ] Water Skiing	[ ] Hunting	[ ] Fire or explosion (Other than fuel)	[ ] Falls in boat	[ ] Improper Loading	[ ] Hunting
[ ] Racing	[ ] Skin Diving/ Swimming	[ ] Fallen Skier	[ ] Hit by Boat or Propeller	[ ] Racing	[ ] Operator Inexperience
[ ] Towing		[ ] Collision with Vessel	[ ] Other (Specify)	[ ] Hazardous Waters	[ ] Operator Inattention
[ ] Other (Specify)	[ ] Being Towed			[ ] Other (Specify)	

PERSONAL FLOTATION DEVICES (PFDS)		PROPERTY DAMAGE	FIRE EXTINGUISHERS
Was the boat adequately equipped with COAST GUARD APPROVED FLOTATION DEVICES? [ ] Yes [ ] No Were they accessible? [ ] Yes [ ] No Were they serviceable? [ ] Yes [ ] No Were they used by survivors? [ ] Yes [ ] No What type? [ ] I, [ ] II, [ ] III, [ ] IV, [ ] V (specify) _____ Were PFD's properly used? [ ] Yes [ ] No Adjusted [ ] Yes [ ] No Sized [ ] Yes [ ] No	Was the vessel carrying NON approved flotation devices? [ ] Yes [ ] No Were they accessible? [ ] Yes [ ] No Were they used? [ ] Yes [ ] No If Yes, indicate kind.	Estimated amount This boat $ Other boat $ Other Property $	Were they used? (If yes, list Type(s) and number used.) [ ] Yes [ ] No [ ] NA Types:
Include any comments of PFD's under ACCIDENT DESCRIPTION on other side of form		**DESCRIBE PROPERTY DAMAGE** **NAME AND ADDRESS OF OWNER OF DAMAGED PROPERTY**	

BOATING ACCIDENT REPORT

If more than 3 fatalities and/or injuries, attach additional form(s)

DECEASED

NAME	ADDRESS	DATE OF BIRTH	WAS VICTIM?	DEATH CAUSED BY	WAS PFD WORN?
			[ ] Swimmer [ ] Non Swimmer	[ ] Drowning [ ] Other [ ] DISAPPEARANCE	[ ] Yes [ ] No What Type?
			[ ] Swimmer [ ] Non Swimmer	[ ] Drowning [ ] Other [ ] DISAPPEARANCE	[ ] Yes [ ] No What Type?
			[ ] Swimmer [ ] Non Swimmer	[ ] Drowning [ ] Other [ ] DISAPPEARANCE	[ ] Yes [ ] No What Type?

INJURED

NAME	ADDRESS	DATE OF BIRTH	NATURE OF INJURY	MEDICAL TREATMENT

ACCIDENT DESCRIPTION

DESCRIBE WHAT HAPPENED (Sequence of events. Include Failure of Equipment. If diagram is needed, attach separately. Continue on additional sheets if necessary. Include any information regarding the involvement of alcohol and/or drugs in causing or contributing to the accident. Include any descriptive information about the use of PFD's.)

VESSEL NO. 2 (if more than 2 vessels, attach additional form (s)

Name of Operator	Address	Boat Number
Telephone Number		Boat Name
Name of Owner	Address	

WITNESSES

Name	Address	Telephone Number

WITNESSES

SIGNATURE	Address	Telephone Number
QUALIFICATION (Check One) [ ] Operator [ ] Owner [ ] Investigator [ ] Other		Date Submitted

(do not use) **- FOR REPORTING AUTHORITY REVIEW** (use agency date stamp)

Causes based on (check one) [ ] This report [ ] Investigation and this report [ ] Investigation [ ] Could not be determined	Name of Reviewing Office	Date Received
Primary Cause of Accident	Secondary Cause of Accident	Reviewed By